

# Darling Downs Pipeline

## Basis of Preparation

Public

Year ended 31 December 2018



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## OVERVIEW

The Australian Energy Regulator (**AER**) issued a non-scheme pipeline financial reporting guideline (**the Guideline**) in December 2017 issued under Part 23 of the National Gas Rules. This Guideline requires service providers of such pipelines to publish certain financial information about those pipelines.

This Guideline applies to the Darling Downs Pipeline (**DDP**) covering the reporting period 1 January to 31 December 2018.

To apply the Guideline we have adopted the following general interpretations:

- All Jemena Group<sup>1</sup> legal entities that have a controlling interest in DDP are 'service providers' and so all costs incurred, revenue earned or assets owned by those entities that relate to the pipeline should be captured and consolidated in the financial reporting templates.
- Similarly, because SGSPAA is the parent company of the Jemena Group acquisition costs and associated dates (mainly in the Recovered Capital Method (**RCM**) template) are determined by reference to that entity for the purposes of complying with the Guideline. This means for instance that the acquisition of the DDP occurred on 6 June 2017 when the Jemena Group acquired the pipeline from Origin.
- DDP has amended some of the formulae in the templates where the resultant outcome was inconsistent with the intent of the Guideline. These changes are explained in the this basis of preparation (**BoP**) document
- Although the DDP consists of three pipeline licences covering different sections of the pipeline that were constructed at different times, together these form a single transmission pipeline for the purposes of complying with the Guideline – and so costs, revenues and asset values are consolidated across those three licences.
- Actual information includes information calculated directly from information contained in Jemena Group's systems and other records without material judgement required. Estimated information is anything other than actual information.
- To meet the requirements of the Guideline when compiling the RCM valuation (section 4.1), DDP undertook all reasonable steps to obtain historical information where this was not already available to the Jemena Group. These steps are further explained in the RCM section (section 13) of this basis of preparation.
- In accordance with the Transitional Arrangements set out in of section 2.1 of the Guideline, DDP has not populated any previous reporting period information in the reporting templates and only included data for the year ended 31 December 2018.
- Jemena Group costs can be direct or indirect in nature. Direct costs, such as maintenance, program management, engineering support are directly allocated to specific assets within the Jemena Group. Jemena Group shared or indirect costs such as IT, finance, legal, people, safety and environment are allocated to specific assets within the Jemena Group in accordance with the principles of the Jemena Group Cost Allocation Methodology procedure. These principles are further explained in the Revenue and Expenses section (section 3) of this Basis of Preparation.

The rest of this basis of preparation document explains how we have populated each of the templates required by the Guideline, including by identifying where estimated data was used when actual data was not available.

As per the Jemena Group access user guide, Jemena Darling Downs Pipeline (1) Pty Ltd, Jemena Darling Downs Pipeline (2) Pty Ltd and Jemena Darling Downs Pipeline (3) Pty Ltd are the service providers for DDP, being the licensed operators. The other service providers in the Jemena Group have appointed Jemena Darling Downs Pipeline (1) Pty Ltd, Jemena Darling Downs Pipeline (2) Pty Ltd and Jemena Darling Downs Pipeline (3) Pty Ltd as the responsible service provider for the purposes of publishing the financial information.

<sup>1</sup> The Jemena Group includes SGSP (Australia) Assets Pty Ltd (**SGSPAA**) and its subsidiaries excluding Zinfra Pty Ltd and its subsidiaries. Jemena Group costs may include charges from Zinfra Pty Ltd and its subsidiaries where they relate to the pipeline.

## 1. PIPELINE INFORMATION

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 1.1: Pipeline Details	No BoP Reference cells in the template	Pipeline details	Actual	<p><u>Pipeline Location and Length</u></p> <p>The data is sourced either from the original as-built survey data, or where that is not available from the results of intelligent pigging data.</p> <p><u>Number of Customers</u></p> <p>Scheduling Tool and Invoices - Scheduling tool compiles data from emails from various shippers in order to complete the nominations, schedules and deliveries for each service.</p> <p><u>Service Type</u></p> <p>As per pipeline type on AEMC's gas scheme register <a href="https://www.aemc.gov.au/energy-system/gas/gas-scheme-register">https://www.aemc.gov.au/energy-system/gas/gas-scheme-register</a> and meets the definition of a transmission pipeline under the National Gas Law.</p>	<p><u>Pipeline Location and Length</u></p> <p>The pipeline lengths are calculated in the Geographic Information System (GIS) by summing the geometric lengths of the pipeline and all its laterals.</p> <p><u>Number of Customers</u></p> <p>Determined Based on scheduling tool and invoices.</p>	N/A
Table 1.2: Pipeline	No BoP Reference cells in the template	Pipeline services provided	Actual	Based on current service offerings	Based on current service offerings as described below. <u>Service description</u>	

# 1 — PIPELINE INFORMATION

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Services Provided					<p>DDP uses customer data to from a scheduling tool to classify services into the categories by the template.</p> <p><u>Provided to non-related parties</u> All services were provided to non-related parties as sourced from the data in the scheduling tool.</p> <p><u>Provided to related parties</u> No services were provided to related parties.</p>	

## 2. FINANCIAL PERFORMANCE MEASURES

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 1.1.1: Return on assets	No BoP Reference cells in the template	Earnings before interest and tax, Total assets, Return on assets	Actual	N/A – Populated based on formulas referencing supporting schedules.	<p>All categories in this template are based on the AER's designed formulae that references the supporting tables within the workbook.</p> <p><u>Earnings before interest and tax</u> References earnings before interest and tax (<b>EBIT</b>) in 'Table 2.1: Statement of pipeline revenues and expenses'.</p> <p><u>Total assets</u> References total assets in 'Table 3.1: Pipeline assets'.</p> <p><u>Return on assets</u> Calculated as: Earnings before interest and tax divided by Return on Assets.</p>	

## 3 — REVENUES AND EXPENSES

### 3. REVENUES AND EXPENSES

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 2.1 Statement of pipeline revenues and expenses	2.1.a	Total service revenue, Other direct revenue, Other revenue	Actual	Populated based on formulas referencing supporting schedules.	<p><u>Total service revenue</u> References 'total direct revenue' 'Table 2.1.1: less 'Other Direct Revenue'.</p> <p><u>Other direct revenue</u> References 'other direct revenue' in 'Table 2.1.1: Revenue by service'.</p> <p><u>Other revenue</u> References the total 'other indirect revenue' in 'Table 2.3.1: Indirect revenue allocation'.</p>	
Table 2.1 Statement of pipeline revenues and expenses	2.1.b	Direct Costs, Shared Costs, Earnings before interest and tax ( <b>EBIT</b> )	Actual	ERP System ( <b>SAP</b> )	<p>Most of the entities within SGSPAA and its controlled entities use an Enterprise Resource Planning (<b>ERP</b>) system known as <b>SAP</b> to collect costs. DDP as part of the Jemena Group, uses SAP to record its financial transactions. Costs are collected in planned maintenance orders (<b>PMO</b>) that cascade up to projects (<b>WBS elements</b>) in SAP based on the activity, on which an employee works or where an external supplier provides goods/services.</p> <p>A reporting tool (<b>BI</b>) is used to download the operating expenditure costs from SAP. The data is aggregated by WBS element and general ledger account code (<b>cost</b></p>	

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p>element) and mapped into the relevant cost category of the template.</p> <p><u>Related party and non-related party</u></p> <p>The majority of costs that DDP incurs are sourced from a related entity, Jemena Asset Management Pty Ltd (<b>JAM</b>), which is part of the Jemena Group. JAM records costs that are attributable to DDP and uses SAP functionality to transfer such costs at zero margin to DDP. These costs are reported in the 'related party transactions' column. Where project costs are collected directly to the pipeline and not through a related party entity they were reported in the 'amounts excluding related party transactions' column.</p> <p><u>Direct costs and Shared costs</u></p> <p>Direct and shared cost classification is based upon the activity/service category codes included as part of the WBS element structure for each project. An activity/service mapping table is used to map activities into relevant cost categories:</p> <ul style="list-style-type: none"> <li>• Direct Costs: Asset Management (Asset: Strategy, Planning, Investment, Information and Management system activities), Service Delivery (Construction &amp; Supply Chain, Maintenance &amp; Faults, Network Control &amp; Emergency Maintenance, Metering, Customer Service), Customer and Markets (Commercial Management).</li> </ul>	



### 3 — REVENUES AND EXPENSES

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<ul style="list-style-type: none"> <li>Shared Costs: Enterprise Support Functions (executive management, finance, legal, human resources, information technology (IT) etc.). <b>Note:</b> Shared costs flow into Table 2.1 from Table 2.4 1 Shared cost allocation.</li> </ul> <p>It should be noted that corporate property costs have been further allocated between direct and shared costs in the template as DDP's Asset Management, Service Delivery, Customer and Markets and Enterprise Support Functions share corporate properties. DDP splits these costs into direct and shared costs using a functional seating allocator split (mainly for direct functions) and historic time-writing data (mainly for the enterprise support functions).</p> <p><u>Mapping into the template categories</u></p> <p>The cost element description field from costs within DDP was used to map into the template's categories (e.g. 'wages', 'other direct costs', 'employee costs', 'indirect operating expenses', etc.). DDP has interpreted direct wages as the payroll costs assigned to staff who directly work on the pipeline. DDP's shared employee costs are the allocated payroll costs of administration type staff such as finance, legal, people, safety and environment.</p> <p>Where project descriptions and activity/service category codes support classification within a more specific category then the cost element based mapping was overridden<sup>2</sup>. The</p>	

<sup>2</sup> Labour cost element mapping was not overridden based on project descriptions and activity/service category code mapping.

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p>following description categories were populated based on project description/activity code mapping:</p> <ul style="list-style-type: none"> <li>• Information technology and communication costs</li> <li>• Rental and leasing costs</li> <li>• Repairs and maintenance</li> <li>• Licence and regulatory costs</li> <li>• Leasing and rental costs</li> </ul> <p>Note: Insurance costs are included in the enterprise supports costs which are shared across the Jemena Group, therefore a \$nil value has been reported for Direct Insurance costs.</p> <p><u>Earnings before Interest and tax (EBIT)</u></p> <p>EBIT is calculated as:</p> <p style="padding-left: 40px;">Total revenue less Total costs</p>	
Table 2.1 Statement of pipeline revenues and expenses	2.1.c	Depreciation, Shared Asset Depreciation	Actual	SAP – Fixed Asset Movement Report ( <b>FAMR</b> ) and Equipment Register	<p>A detailed FAMR was downloaded from SAP.</p> <p>Total depreciation was based on the mapping of the individual assets in the FAMR applied in Table 3.3 Depreciation. DDP used the FAMR Asset descriptions, category and equipment register descriptions to map individual assets into specific categories.</p> <p>All depreciation expenses are recorded directly within the Pipeline and are not transferred from a related party entity</p>	

### 3 — REVENUES AND EXPENSES

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					and therefore are reported in the 'Amounts excluding related party transactions' column.	



## 4 — REVENUE BY SERVICE

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
	2.1.1.b	Customer Contributions	Actual	SAP	<u>Customer Contributions Revenue</u> References 'revenue contributions' in 'Table 2.2'	
	2.1.1.c	Revenue Profit from sale of fixed assets	Actual	SAP	<u>Profit from sale of fixed assets</u> DDP did not record any profit from sale of fixed assets which was checked against the TB .	
	2.1.1.d	Other Direct Revenue	Actual	SAP/Scheduling Tool	<u>Other Direct Revenue</u> Includes: <ul style="list-style-type: none"> <li>• Items that are not pipeline service related and is miscellaneous in nature. DDP collects such items using costs elements and projects; and</li> <li>• That is exempt WAP services.</li> </ul>	

## 5. REVENUE – CONTRIBUTIONS

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 2.2.1: Customer contributions received	No BoP Reference cells in the template	N/A	Actual	SAP	No customer contributions revenue was received during the reporting period as such amounts would have been recorded against an appropriate cost element in DDP's TB.	
Table 2.2.2: Government contributions received	No BoP Reference cells in the template	N/A	Actual	SAP	No government contributions revenue was received during the reporting period as such amounts would have been recorded against an appropriate cost element in DDP's TB.	

### 6. INDIRECT REVENUE

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 2.3.1: Indirect revenue allocation	N/A	N/A	Actual	SAP	No Indirect revenue was allocated to DDP during the reporting period as such amounts would have been recorded against an appropriate cost element in DDP's TB.	

## 7. SHARED COSTS

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 2.4.1 Shared Cost Allocation	2.4.1.a	Description categories, Shared costs excluding related parties, Shared costs paid to related parties, (Gross shared costs), Percent allocated to pipeline, Total allocated to pipeline excluding related parties.	Actual	SAP	<p>Shared Costs relate to enterprise support functions such as executive management, finance, legal, information technology (IT), human resources etc.</p> <p><u>Description categories</u></p> <p>The cost element description field from costs within DDP was used to map into the template's categories (e.g. 'wages', 'other direct costs', 'employee costs', 'indirect operating expenses', etc.).</p> <p>Project descriptions were also used as a basis to categorise costs into description categories (e.g. 'Information technology and communication costs').</p> <p>Where project descriptions and activity/service category codes supported classification within a more specific category then the cost element based mapping was overridden<sup>3</sup>. The following description categories were populated based on project description/activity code mapping:</p> <ul style="list-style-type: none"> <li>• Information technology and communication costs</li> <li>• Rental and leasing costs</li> </ul>	

<sup>3</sup> Labour cost element mapping was not overridden based on project descriptions and activity/service category code mapping.



## 7 — SHARED COSTS

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p><u>Related party and non-related party:</u></p> <ul style="list-style-type: none"> <li>• <u>Shared costs excluding related parties</u> Where projects costs are collected directly to the pipeline and not through a related party entity they were reported in the 'Shared costs excluding related parties' column. Shared asset depreciation is the only value included in this column as depreciation is based on shared assets purchased by the Jemena Group and allocated to DDP.</li> <li>• <u>Shared costs paid to related parties.</u> The gross shared costs paid to related parties e.g. Finance, Legal, Managing Director are the total shared costs incurred across The Jemena Group before allocating to specific assets (e.g. pipelines, distribution networks etc.). Gross shared costs are collected in SAP at the JAM entity. It is at this entity that the allocation of shared costs occur. These allocated costs are transferred to DDP using SAP functionality and mapped into the template categories based on a methodology consistent with the approach outlined above for net shared costs, therefore based on: <ul style="list-style-type: none"> <li>• cost element mapping; and</li> <li>• project descriptions and activity/service category codes</li> </ul> </li> </ul> <p><u>Percent allocated to pipeline and total allocated to pipeline excluding related parties</u></p> <p>As described above, the majority of costs that DDP incurs are sourced from a related entity JAM which records costs</p>	

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p>that are attributable to DDP and uses SAP functionality that transfers such costs at zero margin to DDP. These costs are reported in the 'Shared costs paid to related parties' column.</p> <p>Shared costs are allocated to the pipeline in the following ways:</p> <ul style="list-style-type: none"> <li>• Directly to the asset through a PM Order which is the lowest level cost collector. PM Order's settle or cascade up to a specific project (<b>WBS</b>) in SAP.</li> <li>• Based on allocation methodologies such as historic time-writing data.</li> <li>• Causal drivers e.g. number of laptops users for IT Telecommunication costs.</li> </ul> <p>The costs allocated to each shared cost category (e.g. 'Employee costs', 'information technology and communication costs' etc.) is an aggregate of one or more projects with varying cost allocation percentages from the different shared functions.</p> <p>The percentage allocated to a pipeline is calculated as:  <i>Amounts allocated to pipeline divided by the gross amount across the Jemena Group.</i></p> <p>The shared costs allocated to the pipeline is sourced from SAP using a combination of projects and cost elements.</p>	<p>The causal drivers that allocate shared costs to DDP are a reasonable method for such allocations.</p>



## 8. STATEMENT OF PIPELINE ASSETS

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 3.1: Pipeline assets	3.1.a	Initial construction cost, Initial purchase cost, Additions, Additions and improvements capitalised, Capitalised maintenance, Asset disposal (at cost), Less depreciation.	Actual	Table 3.3.1: Fixed assets at cost - pipeline assets  Table 3.3.2: Shared assets at cost (less straight line depreciation)	All items were populated based on Australian Energy Regulator ( <b>AER</b> ) designed formulas which referenced the supporting 'Table 3.3.1: Fixed assets at cost - pipeline assets'.	DDP believes that the allocation is reasonable as it based on information contained in the Business combination uplift schedule maintained by SGSPAA. This schedule has sufficient DDP pipeline fixed asset categorisation that formed the basis of the allocation of the assets as categorised in the template.
			Actual	The SGSPAA Group Consolidation support schedule (Business Combination Adjustments and Goodwill)	The SGSPAA Group consolidates its business combination adjustments at the SGSPAA level, meaning that it does not distribute any business combination adjustments to its subsidiary entities. The business combination adjustments are maintained in an excel spreadsheet. Business combination adjustments (original cost and accumulated depreciation) that relate to DDP have been allocated to the categories in the template on the basis fixed asset information contained in a Business combination uplift schedule and input from a subject matter expert who assisted in the categorisation of these adjustments into the template categories.	

## 8 — STATEMENT OF PIPELINE ASSETS

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 3.1: Pipeline assets	3.1.a.1	Other non-depreciable pipeline assets	Actual	The SGSPAA Group Consolidation support schedule (Business Combination Adjustments and Goodwill)	The SGSPAA Group consolidates its resulting Goodwill from acquisitions at a SGSPAA level, meaning that it does not pass-on any Goodwill into its subsidiary entities. The business combination adjustments are maintained in an excel spreadsheet outside the SGSPAA Group's SAP system and allocated to the SGSPAA Group's cash generating units (e.g. pipelines) for the purpose of impairment testing, in accordance with Australian Accounting Standards. The Guideline does not restrict consideration to only those assets identifiable at the direct pipeline owning entity level and accordingly DDP allocated Goodwill to the pipeline in its statement of assets. DDP considered this a reasonable allocation and disclosure.	As there is no specific Goodwill category, DDP has included Goodwill in the 'Other non-depreciable pipeline assets' in the template.
Table 3.1: Pipeline assets	3.1.b	Inventories, Deferred tax assets, Other assets	Actual	SAP	<p>All items were balances extracted from DDP's Trial Balances for the reporting period.</p> <p>Other Assets include GL accounts such as accrued receivables and amounts due from related parties as sourced from the TB.</p> <p>SAP has functionality that records and identifies any transactions from related parties to DDP, known as trading partner. Related party loan accounts with each trading partner entity were aggregated, where the receivable amount was greater the payable amount the net amount was reported in 'Other assets'. Where the payable amount was greater than the receivable amount the balance was a net liability and therefore not included in 'Other assets' in</p>	

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p>the template. DDP has a legally-enforceable right to set off the recognised amounts and DDP intends either to settle on a net basis or realise the asset and settle the liability simultaneously.</p> <p>DDP considers, deferred tax assets and other assets as direct assets but has included these assets under the shared supporting assets in the AER template category. In accordance with accounting standards DDP has netted off deferred tax assets and liabilities in its Balance Sheet.</p>	

## 9. ASSET USEFUL LIFE

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 3.1.1: Asset useful life	3.1.1.a	Description (list each individual balance sheet item), Acquisition date, Useful life years, Reason for choosing this useful life	Actual	Table 3.3.1: Fixed assets at cost - pipeline assets  Table 3.3.2: Shared assets at cost (less straight line depreciation)	<p><u>Description (list each individual balance sheet item)</u></p> <p>The 'Description' column was referenced from the 'Description' column as listed in:</p> <ul style="list-style-type: none"> <li>• Table 3.3.1: Fixed assets at cost - pipeline assets</li> <li>• Table 3.3.2: Shared assets at cost (less straight line depreciation)</li> </ul> <p>Assets under construction (<b>AUC</b>) are assets that are still in the process of being constructed and not yet installed ready for use, therefore they are excluded from Table 3.1.1.</p> <p><u>Acquisition date</u></p> <p>The assets in the FAMR sourced from SAP, have been aggregated into similar 'Description' items in Table 3.1.1. As there were numerous individual assets in the FAMR therefore the acquisition date is reported as 'various acquisition dates'.</p> <p><u>Useful life years</u></p> <p>A FAMR lists individual assets that contain the following information:</p> <ul style="list-style-type: none"> <li>• Asset description (text field)</li> <li>• Depreciation start date (date field)</li> <li>• Estimated useful life (years)</li> <li>• Original Cost (\$)</li> <li>• Acquisition (\$) (includes Transfers)</li> </ul>	

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<ul style="list-style-type: none"> <li>• Disposals/retirements (\$)</li> <li>• Accumulated depreciation (\$)</li> <li>• Depreciation for the year (\$)</li> <li>• Depreciation retirements (\$)</li> <li>• Closing book value (\$)</li> </ul> <p>The useful life for each category was calculated based on the calculated weighted average cost useful life formula below with the information sourced from FAMR.</p> <p>Weighted average cost useful life equals:</p> $\sum \frac{(Opening\ Cost + Aquisitions + Retirements)}{Total\ 'Description'\ Cost * Asset\ useful\ life}$ <p>Note that the Total Description Costs is the sum of Opening cost + Additions– Retirements.</p> <p><u>Calculated weighted average cost useful life update: Dec-18 vs Jun-18 Disclosures</u></p> <p>The useful life of assets and their values from the separate fair value artefact were included in the Dec-18 weighted average cost useful life calculation. This resulted in the calculated weighted average cost useful life for some assets categories changing.</p> <p><u>Reason for choosing this useful life</u></p> <p>The economic useful life of individual assets is defined in terms of the Australian Accounting Standards and the asset's expected use to DDP which may not fall within the Guideline's Appendix A – Pipeline asset lives. The estimation of the economic useful life of an asset is a matter of judgement based on the Jemena Group's experience with similar assets.</p>	



## 9 — ASSET USEFUL LIFE

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					Additionally, economic useful life shall be considered in relation to the life assigned to similar assets within the asset category.	

## 10. ASSET IMPAIRMENT

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 3.2.1: Assets impaired	BoP reference field not included in table	Asset description, Impairment amount \$ nominal, Impairment date, Basis for impairment	Actual	SAP	Management tested the DDP Cash Generating Unit, including allocated goodwill for impairment as part of its usual annual impairment testing for December 2018 financial reporting purposes in accordance with Australian Accounting Standard requirements, with no impairment recognised. In assessing the position as at December 2018, management considered both external and internal indicators of impairment such as; changes in the regulatory environment, current and future performance, asset characteristics, physical damage, business environment and market conditions. No impairment was noted as part of testing indefinite life intangible assets therefore no impairment has been recognised for the year ended 31 December 2018.	
Table 3.2.2: Asset impairment reversals	BoP reference field not included in table	Asset description, Prior Impairment amount, Impairment date, Basis for impairment, Reversal amount \$nominal, Reversal date, Basis for Reversal	Actual	SAP	No assets impairment reversals were recorded during the reporting period.	

## 11. DEPRECIATION

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
<p>Table 3.3.1: Fixed assets at cost - pipeline assets &amp;</p> <p>Table 3.3.2: Shared assets at cost (less straight line depreciation)</p>	<p>3.3.1.a</p> <p>3.3.2.a</p>	<p>Description, Category, Acquisition date, Useful life, Estimated residual value, Construction or acquisition cost, Additions, Capitalised Maintenance Disposals, Cost Base, Prior years' accumulated depreciation Current year accumulated depreciation, Written Down Value</p>	Actual	SAP FAMR and equipment listing report	<p>The FAMR lists individual assets that was downloaded from SAP.</p> <p><u>Category</u></p> <p>Each asset was mapped into the relevant categories provided in the AER template drop down list (e.g. Pipeline, Compressor, City Gates etc.) based on:</p> <ul style="list-style-type: none"> <li>• analysis of the FAMR Asset description &amp; Asset class;</li> <li>• input from engineers and subject matter experts; and</li> <li>• where relevant, analysis of a separate corresponding equipment listing report which contains more detailed information than the FAMR.</li> </ul> <p>DDP used subject matter experts to map its asset categories to that in the template as DDP's SAP system was designed prior to the establishment of the GMR reporting regime.</p> <p><u>Description</u></p> <p>The asset description was mapped to the categories in the template except AUC Network which was not included in the AER's drop down list of categories.</p> <p>AUC are assets that are still in the process of being constructed and not yet installed ready for use. Therefore depreciation expense was not yet applied.</p>	

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p><u>Acquisition date</u></p> <p>Refer to 'Acquisition date' explanation for Table 3.1.1 Asset useful life.</p> <p><u>Useful life</u></p> <p>Refer to 'Useful life' explanation for Table 3.1.1 Asset useful life.</p> <p><u>Estimated residual value</u></p> <p>DDP has estimated there to be no residual value for all pipeline assets which is in accordance with its internal Property, Plant and Equipment policy and aligns with AASB 116 Property, Plant and Equipment which recognises that in practice, the residual value of an asset is often insignificant and therefore immaterial in the calculation of the depreciable amount (AASB 116(53)).</p> <p><u>Construction or acquisition cost</u></p> <p>The 'Construction or acquisition cost' column value (\$) was populated for each 'Description' item based on the FAMR data which was aggregated because there were too many separate assets in the FAMR to report them separately in Table 3.3.1. The 'Original cost' of assets in the FAMR were aggregated based on asset 'Description' where the 'Depreciation start date' value was prior to the SGSPAA acquisition of the pipeline in 6 June 2017. Fair value uplift adjustments has been applied to the applicable categories in the template.</p>	

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p>Prior year disposal removed from the 'Construction or acquisition cost' were added back to report a life to date 'Construction or acquisition cost' (refer to disposal explanation below for methodology explanation) prior to SGSPAA's acquisition of the pipeline during June 2017.</p> <p><u>Additions</u></p> <p>The 'Additions' column was populated for each description item based on the FAMR data which was aggregated because there were too many separate assets in the FAMR to report them separately in Table 3.3.1. The 'Original cost' and the 'Acquisition' value of assets in the FAMR were aggregated based on asset 'Description' where the 'Depreciation start date' value was after SGSPAA's acquisition of the pipeline during June 2017.</p> <p>Prior year disposals removed from the original cost were added back to report a life to date original cost after SGSPAA's acquisition of the pipeline during June 2017.</p> <p><u>Capitalised Maintenance</u></p> <p>DDP does not have any capitalised maintenance. Maintenance costs such as day to day servicing including labour, consumables and spare parts are excluded from measurement of an item of PPE in accordance with the SGSPAA Group's PPE policy and AASB 116 (12).</p> <p><u>Disposals</u></p>	

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
					<p>DDP did not have any disposals. DDP took reasonable steps to source historical disposal information but was unable to obtain FAMR transactional data from the previous owner.</p> <p><u>Prior years' accumulated depreciation</u> The Guideline does not require prior years amounts to be populated in the first year of GMR reporting (Section 2.1 Transitional Arrangements) therefore no amounts have been reported.</p> <p><u>Current year accumulated depreciation</u> The 'Accumulated depreciation' and the 'Current year depreciation' values in the FAMR were aggregated for each 'description' row and then populated in this column of the table. Accumulated fair value uplift depreciation has been applied to the applicable categories in the template.</p> <p><u>Written down value</u> The 'Written down value' of all assets in table 3.3.1 was aggregated.</p>	

12. SHARED SUPPORTING ASSETS

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 3.4.1: Shared supporting asset allocation	3.4.1.a	Description (list each individual shared asset category greater than 5 percent), Category of shared assets, Total amount, Percent allocated to pipeline, Total allocated to pipeline	Actual	SAP – FAMR	No Shared Assets are allocated to DDP.	

### 13. RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
Table 4.1: Recovered capital method - pipeline assets	Pipeline Assets	2005, 2010	Construction cost, Additions  BoP Reference: 4.1.a	Actual	SAP FAMR	<p>The SAP FAMR was exported into an excel file. The assets were aggregated by year, based on the year within the field 'Capitalisation date'.</p> <p>Asset additions would be understated to the extent that assets purchased in the past have since left the fixed asset register, either because they were replaced or disposed of.</p> <p><i>Mid-point Net Capital Expenditure Gross Up</i></p> <p>Capex additions and disposals for each year are escalated to a mid-year point to account for the return on capital for capital expenditure incurred during the year.</p> <p><i>Mid Point Gross Capex</i> = <math>Capex \times (1 + Rate\ of\ Return\ percentage)^{0.5}</math></p>	<p>No material replacements or disposals over the life of the pipeline.</p> <p>Pipelines are a stable asset and it is reasonable to expect that there would be minimal disposals.</p>

<sup>4</sup> For all Estimates, refer to the following table explaining why estimates were required, steps taken to locate actual information, the basis for the estimate and why the estimate represents the best estimate possible and has been arrived at on a reasonable basis.



## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
						<p>The Rate of Return percentage input calculation methodology is further explained below (refer to 'Rate of Return' item).</p> <p><u>Update: Dec-18 vs Jun-18 Disclosures</u></p> <ol style="list-style-type: none"> <li>1. Removal of estimated decommissioning asset (non-cash) which is not recorded separately in the fixed asset register. 2005: \$902,518 2010: \$2,666,445 RCM Valuation Impact: \$(3.6)M</li> <li>2. Recategorisation by year for subsequent additions to existing assets in 2018. Previously reported by year based on capitalisation date field. 2010: \$(26,570) 2017: \$(8,467,608) 2018: \$8,494,188 RCM Valuation Impact: negligible</li> </ol>	
Table 4.1: Recovered capital method - pipeline assets	Pipeline Assets	2005 - 2018	Negative residual value BoP Reference: 4.1.b	Estimate	Expert Engineering Report  <u>Inflation rate:</u> SGSPAA internal CY17 budgeted CPI  <u>Discount rate:</u>	<p>Negative residual value is calculated as:</p> $PV(Decommissioning)_t = C_{T_E} \times \frac{(1+i)^{T_D-T_E}}{(1+r)^{T_D-t}}$ <p>Where:</p> <ul style="list-style-type: none"> <li>• <math>C_{T_E}</math> is the estimated cost of decommissioning in dollars as at time <math>T_E</math></li> <li>• <math>T_D</math> is the expected year of decommissioning</li> <li>• <math>i</math> is the estimated inflation rate</li> <li>• <math>r</math> is the estimated discount rate</li> <li>• <math>t</math> is the year of the estimate</li> </ul>	Negative residual value is interpreted as the current value of the forecast decommissioning cost that the service provider will pay when the pipeline is removed from service in the future.

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
					5 year average rate for 15 year Australian Government Securities (AGS) bonds	<p>An Internal Engineering report was used as the basis for estimating the decommissioning cost (<math>C_{Te}</math>).</p> <p><u>Phasing of Negative Residual value</u></p> <p>The year 1 value of the decommissioning cost was reported in year 1. The cost of debt incremental was then reported for each subsequent year.</p>	<p>The expert engineering report is an accurate basis for estimating the cost to decommission the pipeline.</p> <p>The 5 year average of the 15 year AGS bonds are appropriate to estimate rate of return for present value calculation purposes.</p>
Table 4.1: Recovered capital method - pipeline assets	Pipeline Assets	2005 - 2018	<p>Maintenance capitalised</p> <p>BoP Reference: 4.1.c</p>	N/A	<p>2005 – 2017 Origin Energy Trial Balances &amp; Fixed Asset Register</p> <p>2017 - 2018 SAP Trial Balance and FAMR:</p> <ul style="list-style-type: none"> <li>Jemena Darling Downs Pipeline (1) Pty Ltd (DDP 1)</li> </ul>	No data for capitalised maintenance was noted in the review of the Fixed Register reports and the relevant Trial Balances.	

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
					<ul style="list-style-type: none"> <li>Jemena Darling Downs Pipeline (2) Pty Ltd (DDP 2)</li> <li>Jemena Darling Downs Pipeline (3) Pty Ltd (DDP 3)</li> </ul>		
Table 4.1: Recovered capital method - pipeline assets	Pipeline Assets	1 Jan 2005 – 5 June 2017	Disposals (at cost)  BoP Reference: 4.1.d	Estimate	Pipeline Assets – Disposals (at cost) (6 June 2017 – 31 December 2018)	<p>DDP estimated there to be no proceeds of disposals for the pipeline in the pre-acquisition period.</p> <p>This estimate is based on analysis of the actual data for the SGSPAA post-acquisition period when there were no proceeds of disposals for the pipeline.</p>	<p>Disposal (as cost) has been interpreted to mean cash proceeds from the sales of property, plant and equipment which is the equivalent to the cost paid by the 3rd party which acquired the asset.</p> <p>No material proceeds on disposals over the life of the pipeline. Pipelines are a stable asset and it is reasonable to expect that proceeds on disposals of pipeline assets would be immaterial.</p>

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
Table 4.1: Recovered capital method - pipeline assets	Pipeline Assets	6 June 2017 – 31 December 2018	Disposals (at cost)  BoP Reference: 4.1.d	Actual	SAP FAMR: <ul style="list-style-type: none"> <li>• DDP 1</li> <li>• DDP 2</li> <li>• DDP 3</li> </ul>	No proceeds on disposal were noted in the SAP system following a review of the SAP FAMR to identify disposal transactions.	No material replacements or disposals over the life of the pipeline.  Pipelines are a stable asset and it is reasonable to expect that there would be minimal disposals.
Table 4.1: Recovered capital method - pipeline assets	Shared Assets	6 June 2017 – 31 December 2018	Additions  BoP Reference: 4.1.f	Actual	SAP FAMR: <ul style="list-style-type: none"> <li>• DDP 1</li> <li>• DDP 2</li> <li>• DDP 3</li> </ul>	No Shared asset additions were noted based on the performing the following review.  Asset were aggregated by year based on the year within the Depreciation start date (date field) in the FAMR.  Shared assets were identified based on: <ul style="list-style-type: none"> <li>• analysis of the FAMR Asset description &amp; Asset class;</li> <li>• input from engineers and subject matter experts; and</li> <li>• where relevant, analysis of a separate corresponding equipment listing report which contains more detailed information than the FAMR.</li> </ul>	

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
						<p>Judgement was applied to map the items into the shared asset category because the system was designed prior to the establishment of the GMR reporting regime. Materially different categorisation would not result if the SAP system were redesigned to include a field for GMR categories.</p> <p>Shared asset additions were aggregated by year based on the year within the field 'Depreciation start date.'</p>	
Table 4.1: Recovered capital method - pipeline assets	Shared Assets	1 Jan 2005 – 5 June 2017	Construction cost or acquisition cost (where allowed) apportioned, Maintenance capitalised, Disposal (at cost)  BoP Reference: 4.1.e	Estimate	Shared Assets 6 June 2017 – 31 December 2018 Actual Data	<p>Data for the following items was not available prior to the SGSPAA acquisition of the pipeline:</p> <ul style="list-style-type: none"> <li>• Construction cost or acquisition cost (where allowed) apportioned,</li> <li>• Maintenance capitalised,</li> <li>• Disposal (at cost)</li> </ul>	<p>No transactions recorded pre-acquisition for:</p> <ul style="list-style-type: none"> <li>• Construction cost or acquisition cost (where allowed) apportioned,</li> <li>• Maintenance capitalised,</li> <li>• Disposal (at cost)</li> </ul>
Table 4.1: Recovered capital method - pipeline assets	Return of capital	1 Jul 2006 – 5 June 2017	Revenue, Operating expenses  BoP Reference: 4.1.g	Actual	Origin Energy Trial Balance for DDP 1, DDP 2 & DDP 3 for the Reporting Period	<p>Origin energy provided the service provider with Trial Balances from their ERP system.</p> <p>A review was performed on the relevant general ledger accounts included in the SAP Trial Balance to identify any non-cash general ledger accounts including:</p> <ul style="list-style-type: none"> <li>• Profit/(Loss) on disposal of assets</li> </ul>	<p>The only revenue of the entity was pipeline revenue.</p> <p>Assume no material non-cash items included</p>

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
						<ul style="list-style-type: none"> <li>• Bad Debt expense</li> <li>• Impairment expense</li> <li>• Debt forgiveness</li> </ul> <p>ERP trial balances were relied upon because statutory accounts are not prepared for the pipeline.</p>	in revenue receipts and operating expenditure.
Table 4.1: Recovered capital method - pipeline assets	Return of capital	6 June 2017 – 31 December 2018	Revenue, Operating expenses  BoP Reference: 4.1.g	Estimate	SAP Trial Balance for DDP 1, DDP 2 & DDP 3 for the Reporting Period	<p>Revenue and operating expenditure general ledger accounts were aggregated based on the relevant SAP Trial Balances.</p> <p>A review was performed on the relevant general ledger accounts included in the SAP Trial Balance to identify any non-cash general ledger accounts including:</p> <ul style="list-style-type: none"> <li>• Profit/(Loss) on disposal of assets</li> <li>• Bad Debt expense</li> <li>• Impairment expense</li> </ul> <p>ERP trial balances were relied upon because statutory accounts are not prepared for the pipeline.</p>	<p>The only revenue of the entity was pipeline revenue.</p> <p>Assume no material non-cash items included in revenue receipts and operating expenditure.</p>
Table 4.1: Recovered capital method - pipeline assets	Return of capital	2005 - 2018	Net tax liabilities  BoP Reference: 4.1.h	Estimate	<p>Origin Energy Trial Balance for DDP 1, DDP 2 &amp; DDP 3 for the Reporting Period</p> <p>SAP Trial Balance and FAMR for DDP</p>	<p>The pipeline is part of a consolidated tax group and does not pay corporate tax as a stand-alone entity. Therefore the net tax liability needs to be estimated.</p> <p>Net tax liability is calculated as: ((Profit/(loss) before interest, tax, depreciation and amortisation Less tax depreciation</p>	'Net tax liability' is interpreted as the notional cash tax payable that would be payable if the pipeline was a stand-alone entity.

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
					1, DDP 2 & DDP 3 for the Reporting Period	<p>Less interest expense) Multiplied by the tax rate (i.e. 30 percent).</p> <p>Where:</p> <ul style="list-style-type: none"> <li>• Profit/(loss) before interest, tax, depreciation and amortisation equals Revenue less Operating expense explained above.</li> <li>• Tax Depreciation (2005 – 2018) was calculated as: Total Assets divided by tax useful life. The selection of this tax asset life most closely aligns calculated tax depreciation across all component pipelines over 2013 to 2016 with Jemena Group's reported accounting depreciation.</li> <li>• Interest Expense (2005-2018) was calculated as: Opening assets multiplied by gearing ratio multiplied by cost of debt.</li> </ul> <p>The accounting profit and loss has been reviewed to identify material non-cash items that may require adjustment for when estimating the net tax liability cash flow (e.g. Accounting depreciation expense).</p> <p>Interest costs were not allocated down to the pipeline asset level. A notional interest allocation has been included in the net tax liabilities calculation.</p>	<p>When estimating each year's tax depreciation, current year net capex was assumed to be incurred mid-year and therefore only a half year of tax depreciation was incurred.</p> <p>The value of imputation credits to shareholders are not included in the RCM valuation.</p>
Table 4.1: Recovered capital method - pipeline assets	Return of capital	2005 - 2018	Return on capital BoP Reference: 4.1.i	Estimate	Refer to Table 4.1 - Return on Capital (Rate of return).	Return on capital for a given year is estimated as the opening asset value for that year multiplied by the rate of return percentage for that year. Both the opening asset value and the rate of return are explained below.	

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
Table 4.1: Recovered capital method - pipeline assets	Return of capital	2005 - 2018	Return on capital (Opening asset value)  BoP Reference: 4.1.i	Estimate – Due to the impact of Rate of return components.	Prior period within the RCM Calculation	Aggregation of Prior period LTD RCM Inputs. Opening Asset Value = Prior year Closing Asset Value = Prior year Opening Asset + Prior year net Capex (adjusted to end of year timing) – Prior year Return of capital.  Where Return of capital is, Revenue – Operating expenditure – Net tax liabilities - Return on Capital	
Table 4.1: Recovered capital method - pipeline assets	Return of capital	2005 - 2018	Return on Capital (Rate of return)  BoP Reference: 4.1.i	Estimate	The rate of return is estimated with reference to the following source inputs.  Gearing assumption input source:	<u>Weighted Average Cost of Capital (WACC)</u> DDP estimates the rate of return as the nominal vanilla WACC. This approach estimates the rate of return as the weighted average of opportunity costs assessed across two sources of capital funding: debt and equity. $WACC^{vanilla} = gearing \times r_d + (1 - gearing) \times r_e$ Where $r_d$ is the cost of debt, and $r_e$ is the cost of equity.  <u>Gearing</u> The proportion of debt funding 'gearing' has been sourced based on guidance from previous, current,	Gearing assumption The proportion of debt funding to capital is referred to as 'gearing'. DDP applies an assumption of 50 percent gearing, constant over time.  The gearing assumption reflects reliance on the regulatory risk assumption but takes into account evidence



## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
					<ul style="list-style-type: none"> <li>Asset betas adopted by Australian Competition and Consumer Commission (ACCC) and AER since 1998.</li> <li>Asset betas identified by TDB and Frontier</li> </ul> <p>Cost of debt and risk free rate input source: Reserve Bank of Australia, Indicative Mid Rates of Australian Government Securities – 1992</p>	<p>forecast financial information used in statutory, management and budgeting reporting.</p> <p>The asset beta that we use is calculated as:</p> <ul style="list-style-type: none"> <li>the regulatory asset betas adopted by the ACCC and AER since 1998, which has been paired with a gearing assumption of 60 percent; plus</li> <li>the asset beta for samples of businesses with unregulated revenues identified by TDB and Frontier described above), at gearings of 39 percent and 28 percent respectively; less</li> <li>the asset beta for samples of businesses with regulated revenues identified by TDB and Frontier (described above), at gearings of 40 percent and 43 percent respectively.</li> </ul> <p>The service provider considers that a gearing that is consistent with the formulation of asset beta is 50 percent.</p> <p><u>Cost of debt</u></p> <p>The cost of debt in each year is estimated as a prevailing cost of debt across the RCM capital base using the yield on corporate bonds with a broad BBB rating, and terms ranging from one to 10 years.</p> <p>A 10 year yield on Australian Government Securities (<b>AGS</b>) was calculated on each day using linear interpolation between the yield of the bond with the</p>	<p>that the gearing adopted by unregulated businesses is lower than that of regulated businesses.</p> <p>Imputation credits assumption</p> <p>DDP assumes the value of imputation credits ('gamma') is equal to zero reflecting SGSPAA shareholders' tax status in Australia.</p> <p>This assumption is also applied to previous shareholders.</p> <p><u>Cost of debt and tenor assumptions</u></p> <p>The cost of debt is calculated under the assumptions that:</p>

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
					<p>to 2008 – F16, and Indicative Mid Rates of Australian Government Securities – 2009 to 2015</p> <p><i>Equity beta input source:</i> ACCC – final decision PTS (Nov 2002); AER – electricity and distribution WACC parameters (May 2009); AER – rate</p>	<p>highest term that is less than 10 years and the yield of the bond with the lowest term that is more than 10 years.</p> <p>Each interpolated 10 year yield was then converted from the semi-annual basis that the RBA reports them on to an annualised basis to reflect their application consistent with the calculation of the asset valuation;<sup>5</sup> and</p> <p>An average 10 year yield was calculated for each period as the average of the 12 month-end values in that period.</p> <p><u>Cost of equity.</u></p> <p>The cost of equity for each year since the construction of the DDP is estimated using the Sharpe-Lintner capital asset pricing model (S-L CAPM).</p> $r_e = r_f + \beta_e(r_m - r_f)$ <p>where:</p> <p><math>r_e</math> is the cost of equity;  <math>r_f</math> is the risk free rate;  <math>r_m - r_f</math> is the MRP; and  <math>\beta_e</math> is the equity beta.</p>	<ul style="list-style-type: none"> <li>DDP aims to achieve a debt portfolio that is 'staggered' so that debt falls due in relatively equal amounts on a year to year basis, limiting refinancing risk; and</li> <li>DDP aims to achieve a debt portfolio with an average term to maturity from issuance of 10 years.</li> </ul> <p><u>Cost of equity assumptions</u></p> <p>DDP estimates the cost of equity based on an acceptable return that is commensurate with the expected risk SGSPAA shareholders expect from this asset.</p>

<sup>5</sup> We convert semi-annual yields to annualised yield using the following formula:  $y_{annual} = \left(1 + \frac{y_{semi-annual}}{2}\right)^2 - 1$

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
					<p>of return guideline (Dec 2013)</p> <p><i>Market Risk Premium (MRP) input source:</i> Credit Suisse Global Investment Returns Yearbook, prepared by Dimson, Marsh and Staunton (2017 edition)</p>		<p>This value is calculated under the assumption that, for the duration of each gas transportation contract for capacity agreed on the DDP, the cost of equity applying to the capital expenditure associated with that capacity is held constant at the rate applying at the time the contract was entered into until the expiry of the contract.</p> <p>The best available basis for proxying arm's length arrangements is the current contractual arrangements, which were structured by Origin in 2017 in the context of the sale of the pipeline. These represent terms that were necessary in order</p>

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
							<p>for an arm's length party to have sufficient certainty to acquire and operate the DDP. Consistent with this, for the purpose of estimating the cost of equity, we assume that the current contractual arrangements were formed in the year prior to the construction of each component pipeline, rather than their actual signing date in 2017.</p> <p><u>Assumptions applied:</u></p> <ul style="list-style-type: none"> <li>• a risk free rate estimated by reference to the yield on 10 year Australian government securities (AGS);</li> <li>• a constant MRP of 6.6 percent over the life of the pipeline; and</li> </ul>

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
							<ul style="list-style-type: none"> <li>an equity beta ranging from 0.70 to 0.94 over the period (expressed at a gearing of 50 percent – reflecting regulatory precedent as applied by the ACCC and the AER for gas transmission equity betas, plus a positive adjustment to account for the additional risks associated with operating an unregulated gas transmission business such as DDP).</li> </ul> <p>Notes: Equity raising costs (i.e. the upfront expenses business may incur when issuing new capital) are assumed to be equal to zero, which is a conservative assumption.</p>

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
							<p><u>MRP</u></p> <p>The Credit Suisse Global Investment Returns Yearbook, prepared by Dimson, Marsh and Staunton, is a well-accepted source of estimates for average excess returns. The 2017 edition of the yearbook estimates the arithmetic average premium of Australian equities over Australian government bonds to be 6.6 percent over the period from 1990 to 2016.<sup>6</sup> Importantly, this estimate includes only the returns from dividends and capital gains, and is not grossed up for the value of imputation credits. This estimate is therefore consistent</p>

<sup>6</sup> Dimson, E., Marsh, P. and Staunton, M., *Credit Suisse Global Investment Returns Yearbook 2017*, February 2017, Table 13, p 72

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Source	Methodology	Assumptions
	Asset Description	Year	Item & Basis of Preparation (BoP) Reference	Actual / Estimate <sup>4</sup>			
							with a value for gamma of zero.  MRP of 6.6 percent represents our best estimate of a historical average of excess market returns, consistent with valuing imputation credits at zero.
Table 4.2: Pipeline details	Construction date	Actual			SAP FAMR	Extracted the year of construction from the FAMR for the construction assets.	Construction date is interpreted as the mid-point of the year when construction commenced based on reference to the FAMR.
Table 4.2: Pipeline details	Negative residual value	Estimate			Refer to 'Table 4.1: Recovered capital method - pipeline assets' source.	Refer to 'Table 4.1: Recovered capital method - pipeline assets' methodology explanation.	Refer to 'Table 4.1: Recovered capital method - pipeline assets' assumptions.

### Explanation for Estimated Amounts

For estimated amounts, in accordance with the Guideline Section 7 basis of preparation, the following table explains:

- why it was not possible for the **service provider** to provide actual information;
- what steps the **service provider** took to locate actual information;
- if an estimate has been provided, the basis for the estimate, including the methods, assumptions and inputs used
- why the estimate represents the best estimate possible in the circumstances and has been arrived at on a reasonable basis.



## ESTIMATED INFORMATION

Table Name	Base Information			Population Approach	Why it was not possible for the SGSPAA to provide actual information	Steps SGSPAA took to locate actual information;	Basis for the estimate, including the methods, assumptions and inputs used	Why the estimate represents the best estimate possible in the circumstances and has been arrived at on a reasonable basis.
	Asset Description	Year	Item	Actual / Estimate				
Table 4.1: Recovered capital method - pipeline assets	Pipeline Assets	2005 – 2018	Negative residual value	Estimate	<p>Cost have not yet been incurred to decommission the pipeline, therefore an estimate is inherently required to measure future costs.</p> <p>Further, the actual timing of decommissioning the pipeline in the future is also uncertain, therefore increasing the level of estimation required.</p> <p>In addition, the CPI escalation factor and the discount rate inputs are estimates used to inflate for forecast future price increases and then discount to the present value respectively.</p>	No steps taken as actual information does not exist.	An engineering estimate was used to estimate the cost of decommissioning the pipeline.	<p>The estimate is a best estimate because it has been calculated based on the following inputs which are sourced based on best available information:</p> <ul style="list-style-type: none"> <li>• Technical engineering estimate of the cost to decommission the pipeline.</li> <li>• Discount rate: 5 year average for the 15 year Australian Government Securities (AGS) bond rate.</li> <li>• CPI escalation: SGSPAA internal CPI estimate (reasonable when compared with Australian Bureau of Statistics (ABS)/Reserve Bank of Australia (RBA) rate).</li> </ul>

Table Name	Base Information			Population Approach	Why it was not possible for the SGSPAA to provide actual information	Steps SGSPAA took to locate actual information;	Basis for the estimate, including the methods, assumptions and inputs used	Why the estimate represents the best estimate possible in the circumstances and has been arrived at on a reasonable basis.
	Asset Description	Year	Item	Actual / Estimate				
Table 4.1: Recovered capital method - pipeline assets	Pipeline Assets	2005 – 2017	Disposals (at cost)	Estimate	SAP FAMR and general ledger transactional data was not available prior to the SGSPAA ownership period.	Information requests were sent to previous owners but no response was received.	<p>Analysis of SAP FAMR reports since acquisition did not identify a significant level of disposals. Therefore it is unlikely that there would be a material level of proceeds on disposal to use as an input. The SAP FAMR does not report on proceeds on disposals but it can be used as a reference point to assess the level of disposals.</p> <p>Pipelines are a stable asset and it is reasonable to expect that there would be low levels of asset</p>	<ul style="list-style-type: none"> <li>Estimated year of decommissioning the pipeline.</li> </ul> <p>Data from the SGSPAA ownership period is actual data. This actual data represents the best source for arriving at a best estimate.</p>

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Why it was not possible for the SGSPAA to provide actual information	Steps SGSPAA took to locate actual information;	Basis for the estimate, including the methods, assumptions and inputs used	Why the estimate represents the best estimate possible in the circumstances and has been arrived at on a reasonable basis.
	Asset Description	Year	Item	Actual / Estimate				
							disposals and therefore proceeds on disposals of pipeline assets would be immaterial.	
Table 4.1: Recovered capital method - pipeline assets	Return of capital	2005 – 2018	Net tax liabilities	Estimate	An actual 'Net tax liability' for the pipeline does not exist because it is part a consolidated tax group and does not pay corporate tax as a stand-alone entity. Therefore the net tax liability needs to be estimated as if it were a stand-alone entity.	No steps taken as actual information does not exist for net tax liabilities.	<p>Estimated calculated as: Profit/(Loss) before depreciation, interest and tax Less Tax Depreciation Less notional interest) Multiplied by the corporate tax rate (30 percent).</p> <p>The Profit/(Loss) before depreciation, interest and tax has been reviewed to identify material non-cash items that should be removed.</p>	<p>The estimate represents a best estimate because wherever possible actual reference data points have been used as a basis to calculate the estimate.</p> <p>Accounting profit is the best approach for calculating the cash flows each year and therefore is the most appropriate input into the net tax liability calculation.</p>

Table Name	Base Information			Population Approach	Why it was not possible for the SGSPAA to provide actual information	Steps SGSPAA took to locate actual information;	Basis for the estimate, including the methods, assumptions and inputs used	Why the estimate represents the best estimate possible in the circumstances and has been arrived at on a reasonable basis.
	Asset Description	Year	Item	Actual / Estimate				
							<p>Tax Depreciation (2005 – 2018) was calculated as: LTD Net Capex divided by the estimated tax useful life years.</p> <p>The selection of the tax asset life most closely aligns calculated tax depreciation across all component pipelines over 2013 to 2016 with Jemena Group's reported accounting depreciation.</p> <p>Interest expense was calculated based on actual capital expenditure data sourced from the FAMR and the cost of debt and gearing</p>	<p>Accounting profit has been sourced from actual historic records and therefore has been arrived at on a reasonable basis.</p> <p>The first year of post-acquisition tax depreciation is the most appropriate basis to estimate pre-acquisition tax depreciation because it is based on an actual data source.</p>

## 13 — RECOVERED CAPITAL METHOD - PIPELINE ASSETS

Table Name	Base Information			Population Approach	Why it was not possible for the SGSPAA to provide actual information	Steps SGSPAA took to locate actual information;	Basis for the estimate, including the methods, assumptions and inputs used	Why the estimate represents the best estimate possible in the circumstances and has been arrived at on a reasonable basis.
	Asset Description	Year	Item	Actual / Estimate				
							assumed within the recovered capital model.	
Table 4.1: Recovered capital method - pipeline assets	Return of capital	2005 – 2018	Rate of return	Estimate	<p>The Guideline advises that the rate of return should be determined each year and should be commensurate with the prevailing conditions in the market for funds and reflect the risk the service provider face in providing pipeline services.</p> <p>The Guideline Explanatory Statement (pg. 25) advises with regard to the 'Commercial rate of return' that 'Service provides will be able to determine how this input is estimated'. Usage of the term 'estimated' in the Guideline Explanatory Statement implies that SGSPAA is required to estimate this data input.</p>	<p>Actual information does not exist for the rate of return.</p> <p>SGSPAA estimated the rate of return as a WACC and sourced actual data to input into the WACC calculation.</p> <p>The rate of return is a theoretical concept and does not reference DDP costs, rather it references regulatory decisions that have been applied to the relevant time period.</p>	Refer to Table 4.1: Recovered capital method - pipeline assets -rate of return explanation above.	<p>Using a WACC as an estimate for rate of return is an accepted methodology adopted by the Australian Energy Regulatory (AER) and therefore represents the best estimate possible.</p> <p>The data inputs into the WACC have been sourced from published AER accepted sources and therefore is a best estimate which has been arrived at on a reasonable basis.</p>

## 14. PIPELINE DETAILS

Table Name	Item	Actual / Estimate	Source	Methodology	Assumptions
Table 4.2: Pipeline details	Construction date	Actual	SAP FAMR	Extracted the year of construction from the FAMR for the construction assets.	Construction date is interpreted as the mid-point of the year when construction commenced based on reference to the FAMR.
Table 4.2: Pipeline details	Negative residual value	Estimate	Refer to 'Table 4.1: Recovered capital method - pipeline assets' source.	Refer to 'Table 4.1: Recovered capital method - pipeline assets' methodology explanation.	Refer to 'Table 4.1: Recovered capital method - pipeline assets' assumptions.

## 15. CAPITAL EXPENDITURE

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 4.1.1: Capital expenditure greater than 5 percent of construction cost	4.1.1.a	Description of works, Date recognised, Expenditure (\$ nominal)	Actual	SAP (Referencing the RCM template)	<p>DDP analysed the underpinning data for the RCM template and with a view to identifying any capex that is &gt; than 5 percent of the construction cost. DDP had capex that met the criteria of the template in 2017 and 2018.</p> <p><u>2017 and 2018:</u> DDP extracted Description of works, Date recognised and Expenditure (\$ nominal) from the SAP FAMR.</p> <p><u>Mid-point Net Capital Expenditure Gross Up</u> SAP FAMR Expenditure (\$ nominal) are escalated to a mid-year point to account for the return on capital for capital expenditure incurred during the year.</p> $\text{Mid Point Gross Capex} = \text{Capex} \times (1 + \text{Rate of Return percentage})^{0.5}$ <p>The Rate of Return percentage input calculation methodology is further explained with the Recovered Capital Method above (refer to 'Rate of Return' item).</p>	DDP has interpreted that the capex required in the template is for the life to date basis for the pipeline. For the Jun18 disclosures, DDP interpreted that the capex required in the template only related to the period 1 Jan 18 to 30 Jun 18.

## 16. WEIGHTED AVERAGE PRICES

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 5.1 Weighted average prices	No BoP Reference cells in the template	Volume	Actual	Data is sourced from the scheduling tool which compiles data from emails from various shippers in order to complete the nominations, schedules and deliveries for each service. Data from the tool is then populated in a spreadsheet which calculates the appropriate charges and volumes to be invoiced to the shippers.	<p>The "Postage Stamp Transportation Services" category represents revenue and volumes under Firm Forward and Interruptible Services. Per Section 5 of the Guideline, these services are the same charge is payable along the length of the pipeline, irrespective of the distance transported.</p> <p>For "Firm Forward haul transportation services", figures are reported under the capacity based columns as charges are based on Maximum Daily Quantities (<b>MDQ</b>) volumes whilst "Interruptible or as available transportation services" figures are reported under the volumetric based columns as charges are based on actual delivery volumes.</p> <p>Both the volumes and revenue data are compiled from the invoices and used in the weighted average price calculation.</p>	A service is categorised as firm if the charges are not based on throughput.
Table 5.1 Weighted average prices	No BoP Reference cells in the template	Revenue	Actual	Scheduling Tool per above	Based on the scheduling tool, the number of customers can be determined for DDP. As DDP has no more than 2 shippers, an exemption was requested from the AER.	Imbalance charges have been omitted from the weighted average price calculation as it does not form part of the main pipeline revenue generating services. Revenues from Imbalance charges fall under "Other Direct Revenue" in Table



## 16 — WEIGHTED AVERAGE PRICES

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
						2.1.1 and have been reported there instead

## 17. EXEMPT WAP SERVICES

Table Name	Base Information		Population Approach	Source	Methodology	Assumptions
	Reference	Item	Actual / Estimate			
Table 5.1.1 AER Exemptions	No BoP Reference cells in the template	N/A	Actual	Scheduling Tool per above	Based on data from the scheduling tool, the number of customers by service type by pipeline can be determined. Based on this information, the service types by zone that have no more than 2 shippers were identified and were listed out to AER for exemptions to apply in accordance with section 5.3 of the Guideline. The AER has confirmed such exemptions.	

## 18. APPENDIX A - SUMMARY OF FORMULA UPDATES WITHIN TABLES

#	Table	Worksheet	Cell Ref	Title	Explanation & Justification	Excel formula before change	Excel formula after change
1	Table 2.1: Statement of pipeline revenues and expenses	2. Revenues and expenses	D11	Change to prevent the 'Other direct revenue' item being reported twice	The item 'Other direct revenue' appears on both: - Table 2.1: Statement of pipeline revenues and expenses - Table 2.1.1: Revenue by service To prevent the number being reported twice we updated the Table 2.1.1: Revenue by service total to exclude 'Other direct revenue'.	=2.1 Revenue by service! <b>D23</b>	=SUM('2.1 Revenue by service! <b>D11:D21</b> )
2	Table 2.1: Statement of pipeline revenues and expenses	2. Revenues and expenses	D29:D37	Sumif() formula referenced an incorrect range was not using fixed addresses	The sumif() formula referenced an incorrect range and was not using fixed addresses. It appears that as the formula was dragged down the sumif() range continued to change when it should have remained consistent.	E.g. D29 =SUMIF('2.4 Shared costs!\$D10:\$D36,'2. Revenues and expenses!\$C29,'2.4 Shared costs! <b>H10:H36</b> ) E.g. D30 =SUMIF('2.4 Shared costs!\$D11:\$D37,'2. Revenues and expenses!\$C30,'2.4 Shared costs! <b>H11:H37</b> )	E.g. D29 =SUMIF('2.4 Shared costs!\$C\$9:\$C\$17,\$C29,'2.4 Shared costs! <b>\$H\$9:\$H\$17</b> ) E.g. D30 =SUMIF('2.4 Shared costs!\$C\$9:\$C\$17,\$C30,'2.4 Shared costs! <b>\$H\$9:\$H\$17</b> )
3	Table 2.1: Statement of pipeline revenues	2. Revenues and expenses	E29:E37	Sumif() formula referenced an incorrect range was not using fixed addresses	The sumif() formula referenced an incorrect range and was not using fixed addresses. It appears that as the formula was dragged down the sumif() range	E.g. E29 =SUMIF('2.4 Shared costs!\$D10:\$D36,'2. Revenues and expenses!\$C29,'2.4 Shared costs! <b>I10:I36</b> ) E.g. E30 =SUMIF('2.4 Shared costs!\$D11:\$D37,'2. Revenues and	E.g. E29 = SUMIF('2.4 Shared costs!\$C\$9:\$C\$18,\$C29,'2.4 Shared costs! <b>\$I\$9:\$I\$17</b> ) E.g. E30 =SUMIF('2.4 Shared

## APPENDIX A - SUMMARY OF FORMULA UPDATES WITHIN TABLES — 18

#	Table	Worksheet	Cell Ref	Title	Explanation & Justification	Excel formula before change	Excel formula after change
	and expenses				continued to change when it should have remained consistent.	expenses!\$C30,'2.4 Shared costs'!\$I11:\$I37)	costs!\$C\$9:\$C\$18,\$C30,'2.4 Shared costs'!\$I\$9:\$I\$17)
4	Table 3.1: Pipeline assets	3. Statement of pipeline assets	D58	Other depreciable assets - Additions not included in the sumif() formula	<p>The sub-heading 'Other depreciable pipeline assets' does not include a row for 'Additions and improvements capitalised'. The sumif() formula was updated to include 'Table 3.3.1: Fixed assets at cost - pipeline assets - Additions' (column I).</p> <p>Note: No amount reported 'Table 3.3.1: Fixed assets at cost - pipeline assets - Capitalised maintenance' (column J), conclude that it ok to replace Column 'J' with 'I' in the formula.</p>	=SUMIF('3.3 Depreciation'!\$D\$9:\$D\$52,'3.3 Statement of pipeline assets'!C57,'3.3 Depreciation'!\$H\$9:\$H\$52)+SUMIF('3.3 Depreciation'!\$D\$9:\$D\$52,'3.3 Statement of pipeline assets'!C57,'3.3 Depreciation'!\$J\$9:\$J\$52)	=SUMIF('3.3 Depreciation'!\$D\$9:\$D\$52,'3.3 Statement of pipeline assets'!C57,'3.3 Depreciation'!\$H\$9:\$H\$52)+SUMIF('3.3 Depreciation'!\$D\$9:\$D\$52,'3.3 Statement of pipeline assets'!C57,'3.3 Depreciation'!\$I\$9:\$I\$52)
5	Table 3.1: Pipeline assets	3. Statement of pipeline assets	D61	Other depreciable assets subtotal does not include the 'disposals' row.	Other depreciable assets subtotal does not include the 'disposals' row. Therefore the table will not reconcile with 'Table 3.3.1: Fixed assets at cost - pipeline assets' inputs	=SUM(D58:D59)	=SUM(D58:D60)
6	Table 3.3.1: Fixed assets at cost - pipeline assets	3.3 Depreciation	D9	Remove 3.3.1 'City Gates' data validation to enable table 3.1 Sumif() formulas to calculated correctly	Data validation removed to enable input of the text 'City Gates, supply regulators and valve stations'. This changed enabled 'Table 3.1: Pipeline assets 'City Gates, supply regulators and valve stations'	N/A	N/A

## 18 — APPENDIX A - SUMMARY OF FORMULA UPDATES WITHIN TABLES

#	Table	Worksheet	Cell Ref	Title	Explanation & Justification	Excel formula before change	Excel formula after change
					sumif() formula in cells D23:D26 to calculated correctly.		