

	Pricing Methodology	Doc Ref: CORP-PO-015
This is a Controlled Document	Issue Date: Dec 2018	

Pricing for the Back Haul Swap Service

As the Back-haul swap service is a non-firm service dependent on forward flow of the pipeline, the standing price for this service is based on historic Firm Forward Haul pricing and consistent with existing contracts. The standing offer for the Back-haul Swap service is \$0.52 /GJ (\$2018).

Pricing for the Firm Forward Haul Service

Firm capacity will be available from 1 January 2019, which marks a **‘first public release’** of existing capacity on the SEA Gas pipeline system and represents a unique opportunity for those seeking firm capacity to service southern Australian markets.

SEA Gas has developed and structured a service, and associated tariff, based upon forecast / anticipated demand for a westerly Firm Forward Haul product as has been informed by discussions with prospective users and independent market analysis.

SEA Gas has adopted a cost-reflective approach to its pricing methodology for the westerly Firm Forward Haul Service. In doing so, it has considered capital and establishment costs, plus forecast non-capital, operating and maintenance costs.

Revenue requirements have been determined using rates of return commensurate with the expected cost of raising equity and debt, cognisant of the need to achieve commercially sustainable outcomes for SEA Gas and prospective users.

The pricing methodology used to determine the Firm Forward Haul price of \$0.88 per GJ/day is as follows;

- i. The opening asset value as at 1 July 2018 was estimated using historical data on initial construction costs, the amount of capital expenditure since commissioning, the return of capital recovered since commissioning and the value of pipeline assets disposed since commissioning. This determined an asset base of \$435m as at 1 July 2018. This included using a remaining pipeline life of 66.5 years from the original 80 years.
- ii. Using the asset base from (i) and incorporating 10-year forecast inputs (refer below) plus a residual value at the end of the 10 year forecasts, further modelling was performed to derive an Estimate Required Revenue (ERR) for each year. In particular, the ERR was determined:
 - a. Applying a commercial rate of return to that asset base to produce a return on capital, which is configured using a post-tax nominal Weighted Average Cost of Capital
 - b. Incorporating a Return of assets (i.e. Depreciation), which is the sum of:
 - i. Straight-line depreciation of the opening asset value as at 1 July 2018
 - ii. Straight-line depreciation of the capital expenditure incurred in the financial year 2018-19
 - iii. Minus the inflation on opening asset value (i.e. equivalent to regulatory depreciation)

	Pricing Methodology	Doc Ref: CORP-PO-015
This is a Controlled Document	Issue Date: Dec 2018	

- c. Making an allowance for the forecast operating, capital and maintenance costs of keeping the assets in service
 - d. Making an allowance for the 'cost' of tax, based on the approach adopted by the AER to calculate efficient benchmark tax liabilities in the Post-Tax Revenue Model
 - e. Subtracting currently contracted revenues
- iii. Using the ERR and dividing by the available firm forward capacity (in GJ / day), the average tariff per year was determined. Due to forecast movements in expenditure and demand, this process resulted in a wide range (+/- 30%) of average tariffs across individual years.
 - iv. The above range was then 'smoothed' to estimate a price path for each year of the forecast period. The resulting firm forward tariff equates to \$0.88 per GJ / day in \$2018.

The inputs used in modelling (i) and (ii) above included:

- 10-year Operating expenditure forecasts.
- 10-year Capital expenditure forecasts.
- An estimated commercial weighted average cost of capital (based on forecasts assuming that the SEA Gas pipeline would continue to operate with a material portion of forecast revenues from take-or-pay contracts).
- Estimated contractual pipeline capacities for the period 2018 to 2027 (informed by independent market analysis and shipper discussions).
- Gearing of 60%.
- An estimation of annual CPI rates.
- Depreciation rates (consistent with rates outlined by the Australian Energy Regulator's Financial Reporting Guideline for Non-Scheme Pipelines (December 2017)).

However, the standing offer of \$0.88 per GJ/day (for a 10TJ/d service and a term of 5 years) reflects a position that could be reasonably expected in a workably competitive market, in accordance with the objectives of Part 23 of the National Gas Rules.

While the Firm Forward Haul service is the only post-2018 firm service presently identified, SEA Gas would welcome the opportunity to work with interested parties to develop additional services in response to identified needs. Any such additional service offerings will be published by SEA Gas once established.

SEA Gas encourages any interested party to contact SEA Gas at commercial@seagas.com.au to discuss any specific requirements.