DRAFT DECISION
Roma to Brisbane Gas Pipeline Access Arrangement 2017 to 2022

Attachment 10 – Reference tariff setting

July 2017

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165

Email: AERInquiry@aer.gov.au

Note

This attachment forms part of the AER's draft decision on the access arrangement for the Roma to Brisbane Gas Pipeline for 2017–22. 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

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Contents

Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
ATO	Australian Tax Office
capex	capital expenditure
CAPM	capital asset pricing model
CPI	consumer price index
DRP	debt risk premium
ECM	(Opex) Efficiency Carryover Mechanism
ERP	equity risk premium
Expenditure Guideline	Expenditure Forecast Assessment Guideline
gamma	Value of Imputation Credits
MRP	market risk premium
NGL	National Gas Law
NGO	national gas objective
NGR	National Gas Rules
NPV	net present value
opex	operating expenditure
PTRM	post-tax revenue model
RBA	Reserve Bank of Australia
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STTM	Short Term Trading Market
TAB	Tax asset base
UAFG	Unaccounted for gas
WACC	weighted average cost of capital
WPI	Wage Price Index

10 Reference tariff setting

This attachment outlines our assessment of the reference tariffs proposed by APTPPL for the Roma to Brisbane Pipeline (RBP) against the requirements of the National Gas Rules (NGR). Our assessment focuses on the structure of reference tariffs and takes into account the revenue and pricing principles (RPPs).[1]

10.1 Draft decision

Our draft decision on APTPPL's reference tariff proposal can be summarised as follows:

- **Long Term Firm Service (LTFS) reference tariff:** We accept APTPPL's proposal to maintain the postage stamp tariff structure, but require the LTFS reference tariff to be amended to reflect our draft decisions on APTPPL's proposed revenue allowance, revenue smoothing factor, demand forecasts and adjustment from the 2016-17 tariff variation.
- **Short Term Firm Service (STFS) reference tariff:** Consistent with our decision not to approve APTPPL's proposal to define the STFS as a reference service, the access arrangement will not specify a reference tariff for this service. The price of this service will instead be determined through negotiations with APTPPL, with arbitration available as a backstop if negotiations fail.[2]

To give effect to this draft decision a number of amendments will need to be made to APTPPL's proposed access arrangement.

Further amendments will also be required to give effect to our draft decision to define the following services as rebateable services (see Attachment 1):

- **Park and loan services (firm and interruptible):** Our draft decision is to require APTPPL to rebate 90 per cent of the revenue it earns from the provision of these services to shippers
- **In-pipe trading and capacity trading services:** Our draft decision is to require APTPPL to rebate 70 per cent of the revenue it earns from the provision of these two services to shippers.

The reasons for our draft decision are set out in section 10.4.

10.2 Proposal

In keeping with its proposal to define the LTFS and STFS as reference services (see Attachment 1), APTPPL has proposed separate reference tariffs for these two

[1] NGR, r. 100; NGL, ss. 23 and 24 (2), 24(5), 25(6) and 25(7).

[2] NGL, Chapter 6.

services, both of which are capacity based charges[3] and assume a postage stamp tariff structure. Specifically, APTPPL has proposed to charge:

- LTFS users a tariff of $0.6944/GJ of MDQ/day commencing 1 July 2017, with tariffs in subsequent years calculated by applying the reference tariff variation mechanism outlined in Attachment 11
- STFS users 1.66 times the LTFS tariff, which in 2017–18 is equivalent to $1.1527/GJ of MDQ/day. The 1.66 multiplier is based on the reciprocal of the forecast composite load factor for the RBP (60.2 per cent) in 2017–22 access arrangement period (i.e. [1/60.2] x 100 =1.66)[4] and according to APTPPL is required to ensure that the charge payable under the STFS is comparable to the capacity charge that would be payable under a LTFS.[5]

APTPPL's proposed reference tariffs reflect its position on its revenue allowance, revenue smoothing factor and demand forecasts for the 2017–22 access arrangement period. It also reflects the correction of an arithmetic error that was made in its 2016–17 tariff variation. The tariff was adjusted by the consumer price index only; but it should also have been amended by the X-factor for that year and so APTPPL under recovered its allowed revenues in 2016–17.[6]

10.3 AER's assessment approach

In an access arrangement, a service provider is required to specify for each reference service the reference tariff and the proposed approach to the setting reference tariffs.[7] This is done by:

- explaining how revenues and costs are allocated, including the relationship between costs and tariffs[8]
- explaining how the tariffs have been designed to generate the portion of referable total revenue from each reference service and from each user, or class of users[9]
- explaining and describing any pricing principles it employed.[10]

We are required by the NGR to assess APTPPL's proposed reference tariffs. Where we do not accept them, we must determine the initial reference tariffs to apply to each reference service.

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3 Note that in contrast to the current access arrangement, the charging parameter for the STFS and LTFS is capacity based (calculated on the basis of Maximum Daily Quantity (MDQ)), and does not incorporate a throughput charge (based on GJ/year).

4 APA, *Roma to Brisbane Pipeline access arrangement submission, Effective 1 July 2017 to 30 June 2022, September 2016*, p.48.

5 APA, *Roma to Brisbane Pipeline access arrangement submission, Effective 1 July 2017 to 30 June 2022, September 2016*, p.196.

6 Email from APTPPL to AER staff, *Arithmetic bust*, 14 July 2016.

7 NGR, rr. 48(1)(d)(i); 72(1)(j)(i); 72(1)(j)(ii).

8 NGR, r. 93(1)–(2).

9 NGR, r. 95(1).

10 NGR, rr. 48(1)(d)(i); 72(1)(j)(i); 72(1)(j)(ii).

In carrying out our assessment of APTPPL's proposal, we have had regard to:

- APTPPL's proposed access arrangement and other supporting material provided by APTPPL.[11,12,13]
- Stakeholder submissions, which as noted in Attachment 1, raised some concerns about:
    - APTPPL's proposal to maintain the postage stamp tariff structure[14]
    - the 166 per cent premium that APTPPL proposes to charge for the STFS[15]
- Our draft decisions on the specification of reference services (see Attachment 1), APTPPL's revenue allowance (see Attachments 2-9), revenue smoothing factor (Overview) and demand forecasts (see Attachment 13).
- The advice we provided APTPPL during the 2016–17 tariff variation process that it could apply to have the unrecovered amount (approximately $1.6 million) included in its revenue allowance in the 2017–22 access arrangement period.[16]

We have also considered the conditions currently prevailing in the east coast gas market and the effect our decision on reference tariffs could have on market participants in this challenging environment (see Attachment 1, section 1.4.2 for more detail).

10.4 Reasons for draft decision

Having considered APTPPL's proposed reference tariffs, the issues raised by stakeholders, our draft decisions on other aspects of APTPPL's proposal and the relevant provisions in the NGR and NGL, our draft decision is as follows:

- **Reference tariffs:**
    - **LTFS reference tariff:** Our draft decision is to accept APTPPL's proposal to maintain the postage stamp tariff structure, but require the LTFS reference tariff to be amended to reflect our draft decisions on APTPPL's proposed revenue

11 APA, *Roma to Brisbane pipeline access arrangement information: Effective 1 July 2017 to 30 June 2022*, September 2016, pp. 31–32.

12 APA, *Roma to Brisbane pipeline proposed revised access arrangement: Effective 1 July 2017 to 30 June 2022*, September 2016.

13 Australian Energy Council, *Roma (Wallumbilla) to Brisbane Pipeline – Access Arrangement 2017-2022*, 20 October 2016; Shell Australia, *Roma (Wallumbilla) to Brisbane Pipeline – Access Arrangement 2017-2022*, 27 October 2016; Australia Pacific LNG, *Proposed Roma to Brisbane (RBP) Pipeline access arrangement*, 4 November 2016; Origin, *Roma (Wallumbilla) to Brisbane Pipeline – Access Arrangement 2017-2022*, 20 October 2016.

14 Shell, Roma (Wallumbilla) to Brisbane Pipeline - Access Arrangement, 27 October 2016, p.1.

15 AEC, Roma (Wallumbilla) to Brisbane Pipeline - Access Arrangement 2017-2022, 20 October 2016, pp.2-3. APLNG, Submission on RBP Access Arrangement 2017-22, 4 November 2016, p. 2. Shell, Roma (Wallumbilla) to Brisbane Pipeline - Access Arrangement, 27 October 2016, pp.3-4.

16 AER Letter to APTPPL, *Roma to Brisbane Pipeline 2016/17 Reference Tariff–Notification of calculation error*, 25 July 2016.

allowance, revenue smoothing factor, demand forecasts and adjustment from the 2016-17 tariff variation.

  - **STFS reference tariff:** In keeping with our decision not to approve the specification of the STFS as a reference service, the access arrangement will not include a reference tariff for this service. The price of this service will instead be determined through negotiations with APTPPL, with arbitration available as a backstop if negotiations fail.[17]

- **Rebateable services:**
  - **Park and loan services (firm and interruptible):** Our draft decision is to require APTPPL to rebate 90 per cent of the revenue it earns from the provision of these services to shippers.
  - **In-pipe trading and capacity trading services:** Our draft decision is to require APTPPL to rebate 70 per cent of the revenue it earns from the provision of these services to shippers.

Further detail on how we have come to our position on the LTFS reference tariff and rebateable services is provided below.

10.4.1 LTFS reference tariff

Under APTPPL's proposal, users of the LTFS would pay the same reference tariff irrespective of the distance the gas is transported. Shell raised some concerns about this in its submission and suggested that consideration be given to "segmenting" the pipeline to provide better "alignment across usage, cost allocation and pricing".[18] Similar concerns were also raised by other stakeholders in the last two access arrangement reviews.

The postage stamp service on the RBP was originally approved by the ACCC for the 2006–11 access arrangement period. At the time of this decision the RBP was operating close to full capacity. There was therefore a concern that if distance based charges were implemented and this resulted in increased demand for shorter haul services, then it could reduce APTPPL's capacity to transport gas longer distances and may not result in an overall increase in the utilisation of the pipeline.[19]

While the ACCC accepted APTPPL's proposed service and tariff, it foreshadowed the possibility of moving to a zonal or distance based service and tariff in future periods. In doing so, the ACCC noted that there may be a case that users with loads west of

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[17] NGL, Chapter 6.

[18] Shell, *Roma (Wallumbilla) to Brisbane Pipeline - Access Arrangement*, 27 October 2016, p.1.

[19] ACCC*, Final Decision: Revised access arrangement by APT Petroleum Pipelines Ltd for the Roma to Brisbane Pipeline*, 20 December 2006, p. 154.

Brisbane should not have to pay for looping in the Brisbane area and that a zone based tariff might be more appropriate. [20]

At the time the 2012–17 access arrangement was reviewed by the AER, the RBP was also expected to operate at or close to full capacity over the period. We therefore approved the maintenance of the postage stamp reference service.[21]

In the period following these decisions, there has been a substantial reduction in the demand for transportation services on the RBP and looking forward over the next access arrangement period the pipeline is expected to be operating well below its nameplate capacity.[22] The rationale that was previously relied upon to support the use of a postage stamp service has therefore diminished considerably. It is relevant therefore to consider whether:

- the postage stamp service should be retained in the upcoming access arrangement period
- a more cost reflective locational based service should be introduced now given the increasing demand for part-haul services on the RBP.[23]

In principle, if the cost of servicing customers differs over a geographic area, then the use of a postage stamp tariff can give rise to efficiency losses, because the uniform nature of the prices means that tariffs are not cost reflective and as a consequence the tariffs may not provide:

- users with the signals they require to make efficient decisions about their use of the pipeline
- users and the asset owner with the locational signals they require to make efficient operational and investment decisions.

The postage stamp approach can also result in users who only transport gas over a small distance, cross-subsidising users that transport gas over longer distances.

While there is a number of efficiency benefits associated with locational services, a movement from postage stamp tariffs to locational tariffs may result in a significant price shock for some shippers, which could add to the financial pressures that some shippers are facing and trigger further reductions in demand. The efficiency benefits

[20] ACCC, *Final Decision: Revised access arrangement by APT Petroleum Pipelines Ltd for the Roma to Brisbane Pipeline*, 20 December 2006, p. 154.

[21] ACCC, *Draft Decision: Access arrangement Roma to Brisbane Pipeline 2012-13 to 2016-17*, April 2012, p. 57 and ACCC, *Final Decision: Access arrangement Roma to Brisbane Pipeline 2012-13 to 2016-17*, August 2012, p. 139.

[22] APTPPL, *Roma to Brisbane Pipeline access arrangement information*, September 2016, p. 18.

[23] The demand for part-haul services between Kogan and Wallumbilla has been increasing and is forecast by APTPPL to reach 75 TJ/day by 2021-22, which represents 37 per cent of forecast demand in that year. The increasing demand for this service is primarily being driven by users with interests in the Darling Downs region, who are looking to send gas in a westerly direction to Wallumbilla, either for sale in the Gas Supply Hub, or to another location. In contrast to the demand for part-haul services, the demand for full-haul services between Wallumbilla and Brisbane has been declining. It is, however, still forecast to account for 63 per cent of forecast demand over the access arrangement period.

associated with locational services must therefore be carefully weighed up against the impact that its introduction could have on users in both the short and the longer term.

It is with these issues in mind that we have considered whether a movement to a more cost reflective part-haul (zonal) tariff would be appropriate at this point in time.

To inform our consideration of this issue, we examined the effect that the delineation of the following zonal options would have on tariffs:

- Option 1 (three zones): Wallumbilla to Kogan, Kogan to Dalby and Dalby to Brisbane.
- Option 2 (two zones): Wallumbilla to Dalby and Dalby to Brisbane.
- Option 3 (two zones): Wallumbilla to Kogan and Kogan to Brisbane.

To calculate the tariffs that would be payable in each of these zones, we have assumed that costs are proportional to the length of each zone, calculated from the end point distances of each zone (see Table 10-1). In our view, this is a reasonable assumption to make given the pipeline value constitutes the majority of APTPPL's revenue requirement and its costs are relatively uniform across the length of the RBP. The use of this approach is also consistent with the approach the Economic Regulatory Authority (ERA) has used when setting zonal tariffs on the Dampier to Bunbury Natural Gas Pipeline in Western Australia.[24]

Table 10-1: Zonal cost allocations

Zone	End point, Km	Zone Length, km	Cost allocation (per cent)
Wallumbilla-Kogan	183	183	42
Kogan-Dalby	332	139	32
Dalby-Brisbane	427	115	26

Table 10-2 sets out the tariffs that would be payable for the LTFS under each of these options in the access arrangement period and also sets out the tariff that would be payable if the postage stamp tariff structure was maintained.

The tariffs in Table 10-2 have been calculated using our draft decision inputs on APTPPL's proposed revenue allowance, revenue smoothing factor and demand forecasts. The tariffs appearing in this table are not therefore directly comparable with APTPPL's proposal.

[24] See ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline*, 2 November 2005, p. 88 and ERA, *Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline 2016-2020*, 2 November 2005, p. 92.

Table 10-2: Postage stamp vs part-haul (zonal) tariffs ($/GJ of MDQ/day)

	2017-18	2018-19	2019-20	2020-21	2021-22
Postage Stamp Tariff					
Wallumbilla to Brisbane	$0.6843	$0.7007	$0.7176	$0.7131	$0.6794
Option 1					
Wallumbilla to Kogan North	$0.2882	$0.2951	$0.3022	$0.3003	$0.2861
Wallumbilla to Dalby	$0.6589	$0.6748	$0.6910	$0.6867	$0.6542
Wallumbilla to Brisbane	$1.0163	$1.0407	$1.0657	$1.0590	$1.0090
Option 2					
Wallumbilla to Dalby	$0.5070	$0.5192	$0.5317	$0.5284	$0.5034
Wallumbilla to Brisbane	$0.8644	$0.8851	$0.9064	$0.9007	$0.8582
Option 3					
Wallumbilla to Kogan North	$0.2882	$0.2951	$0.3022	$0.3003	$0.2861
Wallumbilla to Brisbane	$0.9657	$0.9889	$1.0126	$1.0063	$0.9588

Source: AER analysis

As Table 10-2 highlights, all of the part-haul (zonal) options result in:

- higher tariffs in the Brisbane zone than would occur under the postage stamp approach, with Option 1 resulting in the greatest increase (49 per cent), followed by Option 3 (41 per cent) and Option 2 (26 per cent).
- lower tariffs in the Wallumbilla to Kogan/Dalby zones than would occur under the postage stamp approach, with Options 1 and 3 resulting in the greatest reduction (58 per cent) followed by Option 2 (26 per cent).

Any decision to retain the postage stamp tariff structure or to move to a more cost reflective tariff structure will therefore create winners and losers.

In this case, the movement to part-haul (zonal) based tariffs would benefit those users that only need to use the Wallumbilla to Kogan/Dalby section of the pipeline, which includes:

- the Braemar power station
- industrial customers, gas fired generators and other domestic customers located in other areas of Queensland and south eastern Australia that source gas from the Wallumbilla to Kogan region directly or via the Wallumbilla Gas Supply Hub (GSH)
- some LNG proponents who source gas from the Wallumbilla to Kogan region either directly or indirectly via the GSH.

From an economic efficiency perspective, part-haul (zonal) tariffs would also:

- be more consistent with the efficiency principles embodied in the RPPs (i.e. it should provide a better signal of the costs of using pipeline services and promote the efficient use of, investment in, and provision of services)[25]
- promote liquidity in the Wallumbilla Gas Supply Hub (GSH) (consistent with the COAG Energy Council's reform agenda) by reducing the financial barriers to gas produced in the Wallumbilla to Kogan region flowing to the GSH and, in so doing, enable gas to be transported to those areas where its value in use is highest.

While there are a number of efficiency benefits associated with part-haul (zonal) tariffs, these benefits must be carefully weighed against the effect that a movement to this tariff structure could have on industrial customers and other users in the Brisbane region that would be affected by the change, particularly given this is still the main source of demand for the pipeline.

If the pricing pressures in the east coast gas market were not as significant as they currently are, then we would feel more confident to move to a part-haul tariff. We are, however, concerned that increasing transportation charges to Brisbane by a significant margin at this point in time could place additional financial pressure on some shippers located in the Brisbane region[26] and exacerbate what is already a financially challenging environment for many gas users. If this was to trigger further reductions in the demand for the services provided by the RBP, then it could have longer term consequences for consumers of natural gas that continue to be supplied by the pipeline (i.e. because the cost of operating the pipeline will be spread over a smaller demand base) and the efficient use of the pipeline, contrary to the NGO.

Having regard to the matters outlined above and the challenges currently facing the east coast gas market, our draft decision is to allow the postage stamp tariff structure to be retained in the upcoming access arrangement period. However, this draft decision is finely balanced and we are interested in hearing stakeholders' views on this issue and the tariff options set out in Table 10-2 before we make a final determination.

Adjustment to tariffs for past calculation error

During the 2016–17 reference tariff variation process a calculation error was made, which resulted in the tariffs from the previous year being adjusted by the Consumer Price Index only and not the X factor. This error resulted in APTPPL under recovering approximately $1.6 million in revenue in 2016–17.

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25 NGR, ss. 24(3), 24(5), 24(6) and 24(7).

26 Note that the change would only affect those shippers whose contracts are due to expire in the access arrangement period, existing and prospective shippers that are seeking new services.

In July 2016 APTPPL sought AER permission to adjust its tariffs immediately to correct for this clerical error.[27] We advised APTPPL that it should seek to account for this clerical error by adjusting proposed revenue in its proposed 2017–22 access arrangement. This was because the 2012–17 access arrangement only permitted a change to subsequent tariffs once approval was granted. Thus, we considered that 2016–17 tariffs could not be changed. Furthermore, as that regulatory year was already underway, we considered a better approach was to adjust a future year's tariff to avoid confusing users.[28]

We accept that a miscalculation did occur during the 2016–17 tariff variation process. We have therefore allocated the under recovered revenue into the 2017–18 revenue allowance. Our draft decision on the LTFS reference tariff reflects the effect of this adjustment.

Revenue reconciliation factor

In APTPPL's proposal, the LTFS reference tariff multiplied by the forecast demand would reconcile against smoothed revenue in each year of the 2017–22 access arrangement period. To perform the same reconciliation in our draft decision requires the use of a revenue reconciliation factor (RRF). This RRF reflects the combined revenue impact of certain commercial in confidence factors not otherwise described in this public attachment.[29] Table 10-3 shows the approved draft decision tariffs, forecast demand and RRF used to derive the smoothed revenue for each year of the 2017–22 access arrangement period.

Table 10-3: Reconciliation of revenues, reference tariffs and demand (nominal)

	2017–18	2018–19	2019–20	2020–21	2021–22
LTFS reference tariff ($/GJMDQ/day)	0.6843	0.7007	0.7176	0.7131	0.6794
Demand forecast (TJMDQ/day)	200	200	200	200	200
Revenue reconciliation factor (RRF)[a]	0.93	0.92	0.92	0.92	0.93
Building block revenue – smoothed ($m)[a]	**22.93**	**47.27**	**48.46**	**48.15**	**46.30**

Source: AER analysis

(a) The figures shown are for half the financial year reflecting the expected 1 January 2018 commencement of the 2017–22 access arrangement period.

27 Clause 4.5.5 of the current access arrangement says that if a past annual tariff adjustment contains a clerical mistake, accidental slip or omission, miscalculation or mis-description then subsequent tariffs can be amended to take account of this.
APT Petroleum Pipelines Pty Ltd, *Roma To Brisbane Pipeline Access Arrangement, 1 September 2012 to 30 June 2017*, August 2012, p. 19.

28 AER Letter to APTPPL, *Roma to Brisbane Pipeline 2016/17 Reference Tariff–Notification of calculation error*, 25 July 2016.

29 See confidential appendix A to this attachment.

Draft decision on the LTFS reference tariff

In Table 10-4Table 10-4 we set out the draft decision on the starting tariff for the LTFS. It is worth noting that while our draft decision is based on a lower revenue allowance than proposed by APTPPL, our starting tariff is higher than APTPPL's proposal because:

- our calculation assumes the revenue smoothing factors set out in the revisions table below rather than the -5 per cent proposed by APTPPL. The use of our smoothing factors result in a smoother price path over the period.

Table 10-4: LTFS reference tariff 1 July 2017 ($/GJ of MDQ/day)

	2017-18
Wallumbilla to Brisbane	$0.6843

10.4.2 Rebateable services

As noted in Attachment 1, our draft decision is to define park and loan services (firm and interruptible), in-pipe trading services and capacity trading services as rebateable services. Rule 93(3) of the NGR allows us to allocate the costs of providing these services, in whole or part, to the reference services if we are satisfied that:

- the service provider will apply an appropriate portion of the revenue generated from the sale of rebateable services to provide price rebates (or refunds) to the users of reference services
- any other conditions determined by the AER are satisfied.

This requires us to decide:

(a) what share of the revenue from rebateable services will be rebated to customers, and

(b) the mechanism by which the rebate will be provided to customers.

Our draft decision on these two issues is set out below.

10.4.2.1 Share of revenue to be rebated to customers

The NGR does not set out any rules that we must apply when determining the share of the revenue that a service provider generates from the provision of rebateable services that is to be returned to customers. However, given a service provider is likely to incur some incremental costs when providing these services, we think it is appropriate that it keep some of the revenue so that it has a reasonable opportunity to recover at least the efficient costs associated with providing the services. We also think it is appropriate to allow service providers to retain a greater share of the revenue where the service is a relatively new and innovative service, so that it has an effective incentive to respond to customer needs.

In the case of new and innovative services, such as in-pipe trading and capacity trading services, we are of the view that the 70:30 benefit sharing ratio used in the efficiency carryover mechanism provides a good basis for sharing the revenue derived from the provision of these services. Using this sharing ratio, shippers will receive 70 per cent of the revenue that APTPPL earns from in-pipe trading and capacity trading services and APTPPL will retain the remaining 30 per cent. In our view, this sharing ratio provides a reasonable balance between:

- promoting the efficient use of the pipeline (i.e. by ensuring the prices charged for reference services are relatively cost reflective), and
- promoting innovation and the efficient provision of pipeline services and efficient investment in the pipeline over the longer term (i.e. by rewarding APTPPL for responding to customer needs).

It should also provide APTPPL with a reasonable opportunity to recover the incremental costs it incurs when providing these services.

For less innovative services, such as park and loan services, which have been offered by contract carriage pipelines for some time, we are of the view that a lower sharing ratio is required because there is less need to reward a service provider for innovation. The service provider must still, however, be given an opportunity to recover any incremental costs it incurs in providing these services. APTPPL has not provided any information in its submission on the incremental costs it incurs in providing park and loan services, so for the purposes of the draft decision we have adopted a 90:10 sharing ratio. If APTPPL is able to demonstrate in its response to the draft decision that this sharing ratio would prevent it from recovering its incremental costs, then we will revisit this ratio. For current purposes though, we have assumed that customers will receive 90 per cent of the revenue that APTPPL earns from park and loan services and APTPPL will retain the remaining 10 per cent.

As noted above, we have not previously had to make a decision about the appropriate sharing ratio to apply to rebateable services. We are therefore interested in hearing from stakeholders on the proposed ratios.

10.4.2.2 Process for providing rebates to customers

In a similar manner to the sharing ratio, the NGR do not prescribe the process or mechanism to be used to provide the rebate to customers. We have also not previously had occasion to consider what arrangements should be put in place to return the relevant portion of revenue to users under NGR r. 93(3). Other regulators considering this matter have largely adopted the rebate mechanisms put forward by service providers without needing to engage with the merits of various options.

In considering the rebate mechanism, we have been mindful of the possibility of a perverse outcome if there are only a few reference service users to share in the total amount of revenue to be rebated (the ‘rebate pool’). This is a distinct possibility since parties are free to depart from the reference service to negotiate bespoke services aligning with their individual needs. At the extreme, if the users of reference services numbered one or two, the resulting payments from the rebate pool in a given period could conceivably exceed the transportation fees that users would otherwise be liable to pay for that period. We consider this outcome would be inappropriate.

We have considered a number of mechanisms to address this. One option is to share the rebate revenue between users of both reference services, and gas transportation services which are in the nature of reference services (i.e. any firm transportation service). This would share the rebate between all shippers using firm transportation services in proportion to their usage, diminishing the risk of an inefficient windfall for one or two users.

Another option is to deduct the revenue received from the proposed revenue requirement for the access arrangement, following the period in which the services were sold by APTPPL. This would be the access arrangement for the five year period commencing 1 July 2022. This would involve a five year lag in returning rebateable amounts to customers. As a refinement of this option, the revenues could be calculated each year based on actual revenue received and deducted from the annual revenue requirement, which would reduce reference tariffs each year for all shippers.

In our view, both of these options would promote the NGO and are consistent with the RPPs as they would forestall an arbitrary windfall for a limited number of users. The NGR provides for rebates to reference service users because their tariff – the reference tariff – includes the costs of providing the rebateable services. Users of the 'reference-like services' discussed above are also contributing to the cost base underpinning the reference tariff. We consider this justifies a condition in the mechanism requiring the rebate to a wider class of shippers than merely those using the reference service.

The benefit of the first option is that customers who use the services directly get the rebate and in a more timely way (i.e. each year of the access arrangement). It also means that customers of the reference services will also receive a rebated amount where the service provider sells a rebateable service. We therefore consider this approach the most appropriate mechanism for returning the revenue derived from rebateable services to customers.

We also considered a model proposed by APTPPL whereby the rebate 'pool' would be returned to users of the reference service based on the fraction of their reserved capacity over the total reserved capacity of the RBP. Under this proposal, if the rebate pool is $1 million and there are only two reference service customers, each accounting for one one-hundredth of the total reserved capacity, then each customer would receive one one-hundredth of the rebate pool (or $10,000) with the balance ($980,000) retained by APTPPL.

We are not persuaded APTPPL's model is the most appropriate option in light of the NGO and the RPPs. Certainly it would prevent a disproportionate benefit accruing to users of the reference service, but it also may result in a windfall to the service provider (i.e. because the costs of providing the services have been included in the calculation of the reference services). We agree APTPPL is entitled to a share of the rebateable revenue, and as discussed above we consider the appropriate quantum is 30 per cent or 10 per cent, depending on the service. The fact that the costs of rebateable services are factored into reference tariffs makes it appropriate that the rebateable amount is actually returned to users of the reference services and similar firm transportation services.

Those rebates would be in the form of automatic funds transfer to shippers in the following proportions:

- In-pipe trading services—70 per cent of actual revenue earned by APTPPL from the provision of this service by the RBP
- Capacity trading services—70 per cent of actual revenue earned by APTPPL from the provision of this service by the RBP, and
- Park and loan services—90 per cent of actual revenue earned by APTPPL from the provision of this service by the RBP.

10.5 Revisions

We require APTPPL to include the following revisions in its revised access arrangement.

Clause	Amendment
Access Arrangement	
4.2.1	***Reference Services and Tariffs*** (a) The amount payable by the User for the Long Term Firm Service Reference Service is the Long Term Firm Service Charge. ~~(b) The amount payable by the Uer for the Short Term Firm Service Reference Service is the Short Term Firm Service Charge.~~ (~~c~~b) Users will also pay any Other Tariff Charges applicable.
4.2.2	~~***Short Term Firm Service Charge***~~ ~~The Short Term Firm Service Charge for each Day is the product of:~~ ~~(a) the Short Term Firm Reference Tariff; and~~ ~~(b) the Firm MDQ (expressed in GJ) specified in the Transportation Agreement.~~ Not used
4.5.1	***Annual Reference Tariff adjustment formula mechanism*** The Capacity Tariff for the Long Term Firm Service to apply on 1 July 2018 and on each subsequent 1 July, will be adjusted according to the following formula: $RT_n = RT_{n-1} \times \left[1 + \frac{CPI_{n-1} - CPI_{n-2}}{CPI_{n-2}}\right] \times (1 - X)$ Where: RT_n means the Long Term Firm Service ~~Capacity~~ Tariff in Year n n means the Year in which the adjusted Long Term Firm Service Tariff is to be applied RT_{n-1} means the ~~Capacity~~ Long Term Firm Service Tariff in Year n – 1 CPI_{n-1} is the Consumer Price Index for the March quarter applying in the year n – 1. For tariffs in 2018–19, n-1 is March quarter 2018 CPI_{n-2} is the Consumer Price Index applying for the March quarter in year n – 2. For tariffs in 2018–19, n-2 is March quarter 2017.
4.8	**Rebate mechanism**
4.8.1	***Rebate Pool*** Service Provider will track revenue received through the provision of Rebateable Services, and will allocate the following proportions of those revenues to the Rebateable Service Rebate Pool: (a) For Capacity Trading Services and In-Pipe Trade Services – 70 per cent of the revenue;

Clause	Amendment
	(b) For Parking Services and Loan Services – 90 per cent of the revenue.
4.8.2	***Distribution of Rebate Pool*** Service Provider will rebate to each Shipper taking a Reference Service, or service in the nature of a Reference Service, a proportion of the Rebateable Service Rebate Pool as determined by the following formula: For in-pipe trading services and/or capacity trading services: $\sum_{Day=1}^{365} 0.70 \left[\frac{Capacity\ Reserved\ Shipper\ n}{Shipper\ n\ Total\ Usage}\right]$ For Park and loan services: $\sum_{Day=1}^{365} 0.90 \left[\frac{Capacity\ Reserved\ Shipper\ n}{Shipper\ n\ Total\ Usage}\right]$
4.8.3	***Payment of Rebate*** Service Provider will pay each shipper its proportion of the Rebateable Service Rebate Pool annually within 14 days of the end of each financial year.
Sch. 1	**Details** **[…]** **Reference Tariffs:**

Reference Service	Reference Tariff $ per GJ of MDQ/Day
LTFS	$0.6843

Forecast X-factors:

	1 July 2018	1 July 2019	1 July 2020	1 July 2021
X Factor	0.05	0.05	3.00	7.00

The X factor for each financial year of the 2017-22 access arrangement period will be determined in the PTRM as approved in the AER's final decision, and annually revised for the changes in ~~the Consumer Price Index and~~ the return on debt update calculated for the relevant financial year during the access arrangement period in accordance with that approved in the AER's final decision.

[…]

Rates and allowances

~~**Short Term Firm Reference Tariff** – 166% of the Long Term Firm Reference Tariff~~

[…]