FINAL DECISION
APA VTS Australia
Gas access arrangement
2018 to 2022

Attachment 10 – Reference tariff setting

November 2017

AUSTRALIAN ENERGY REGULATOR

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Shortened forms

Shortened form	Extended form
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
APA	APA VTS Australia (Operations) Pty Ltd and APA VTS Australia (NSW) Pty Ltd
capex	Capital expenditure
CCP11	Consumer Challenge Panel, Sub-panel 11
NGL	National Gas Law
NGR	National Gas Rules
opex	Operating expenditure
SWP	South West Pipeline
VNI/VNIE	Victorian Northern Interconnector / Victorian Northern Interconnector Expansion
VTS	Victorian Transmission System
WORM	Western Outer Ring Main

10 Reference tariff setting

An access arrangement must set out how a service provider intends to charge for reference services. This final decision sets out our assessment of APA's proposed reference tariffs against the provisions of the NGR[1] and the NGL[2].

In our draft decision, we accepted APA's proposed tariff design, structure and cost-allocation methodology to calculate reference tariffs, with one exception.

The draft decision required users who ship gas across the Victorian transmission system (VTS) from Longford or Culcairn into Iona storage and subsequently export gas to South Australia via the SEAGas pipeline to pay the APA VTS cross system tariff, in addition to the APA VTS storage refill tariff.

This was to address our concern that these shippers are currently not paying for the use of the VTS, and that Victorian users may end up subsidising South Australian customers. The draft decision aimed to remove this subsidy.

This aspect of our draft decision differed from APA's current 2013–17 access arrangement, where users that ship gas across the VTS from Longford or Culcairn into Iona storage and then export it to South Australia only pay the storage refill tariff.

We invited submissions from stakeholders on the draft decision proposed approach. APA disagreed with our approach and included an alternative in its revised proposal.

This attachment sets out our final decision on APA's proposed reference tariffs. In particular it sets out our assessment of APA's revised proposal in response to our draft decision in relation to the VTS cross-system tariff and our consideration of stakeholder submissions.

10.1 Final decision

For the reasons set out in section 10.4 of our draft decision, our final decision is to:

- accept the fundamental features of APA's proposed reference tariffs for the VTS, including tariff design, the zonal tariff structure and the basis for charging users
- accept APA's cost allocation methodology, incorporating inclusion of
    - Western outer ring main (WORM) costs
    - changes for South West Pipeline (SWP), storage refill and the Victorian Northern Interconnector (VNI).

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1 NGR, rr. 93 , 95 and 96.

2 NGL, ss. 23 and 24.

- Prudent discounts (Maryvale zone, Western zone and Dandenong bypass tariff and matched rebates (Latrobe, Lurgi, Tyres and West Gippsland zones).

However, our final decision does not approve APA's revised proposal to apply the cross system tariff to all users who ship gas from Longford or Culcairn into Iona storage. Our revisions are reflected in the access arrangement for 2018–22 which gives effect to this decision.

This means we do not seek amendments to the current 2013-17 Access Arrangement to implement the cross-system tariff proposal that was included in our draft decision. Nor do we accept the version of the cross-system tariff that APA proposed in its revised access arrangement proposal in response to our draft decision.

Under the current approach, users that ship gas across the VTS from Longford or Culcairn into Iona storage and subsequently onto the SEAGas pipeline will be charged only the refill tariff. They will not pay the cross-system tariff.

We have also re-calculated reference tariffs, so that they reflect our final decision demand, capex, opex and rate of return forecasts.

10.2 APA's revised proposal

In its August 2017 revised proposal, APA proposed that the cross-system tariff should be charged to all users that ship gas from Longford or Culcairn across the VTS and into Iona storage, rather than only those who subsequently export gas to South Australia from the Iona storage facility.

APA's revised proposal recognised our draft decision rationale of user pays, but identified some issues with implementation of the draft decision's move to apply the cross-system tariff to only those flows eventuating on the SEAGas pipeline (through which gas is exported to South Australia). APA submitted that:

- APA does not own or have access to meter data to ascertain gas volumes that are sent to South Australia via Iona storage.
- APA has no meaningful way of identifying or measuring gas going to South Australia.
- There is a temporal aspect to the AER's draft decision. Gas may flow across the VTS and into Iona storage, only to be diverted to South Australia some time later.
- Aligning billing for Iona refill with South Australian flows may not be possible.
- It would also be very difficult to identify whether gas that is sent to South Australia via Iona storage was originally sourced from Longford or Port Campbell.[3]

[3] APA VTS - *Access Arrangement revision proposal submission* - 20170814 - Public, p. 103-104

APA proposed that these issues could be addressed by applying the cross-system tariff to all gas injected at Longford that was withdrawn at the Iona storage facility and not just those that subsequently go to South Australia. APA made revisions to its access arrangement to achieve this.

APA also considered that a 'user-pay' principle would support broader application of the cross-system tariff to all Iona refill volumes that are sourced from Longford. This is because it is these flows that have increased the peak needs for westbound flows on the SWP that have driven the WORM project. All flows from Longford to Iona drive the WORM project, not just those that ultimately travel to South Australia.[4]

10.3 Assessment approach

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

- explaining how revenues and costs are allocated, including the relationship between costs and tariffs[5]
- 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[6]
- explaining and describing any pricing principles it employed.[7]

We assess APA's proposed reference tariffs against the provisions of the NGR and the NGL, in particular rules 93, .95 and 96 of the NGR. We must also take into account the revenue and pricing principles[8] and the requirement for consistency with the National Gas Objective.[9]

Rules 93 and 95 require that reference tariffs for reference services be designed to reflect current and expected future demand, and the allocation of costs between reference and non-reference services. Where we do not accept the proposed reference tariffs, we must determine the initial reference tariffs to apply for each reference service.

Our assessment of the proposed reference tariffs in APA's revised proposal included:

- review of the access arrangement information[10] and access arrangement revised proposal[11] submitted by APA for the 2018–22 access arrangement review

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4 APA VTS - *Access Arrangement revision proposal submission* - 20170814 - Public, p.104

5 NGR, rr. 93(1)–(2), 72(1)(j)–(l).

6 NGR, r. 95(1).

7 NGR, r. 72 (1)(j)(ii).

8 NGL, s 28(2); s. 24.

9 NGR, r 100(a); NGL, s. 23.

10 APA, *Victorian Transmission System Access Arrangement Information Effective 1 January 2018 to 31 December 2022*, January 2017, pp. 28–35.

11 APA, *VTS Revision Proposal submission*, 3 January 2017 pp. 18–21, 242–245.

- a workshop between the AER, APA and AEMO to discuss the cross system tariff
- regard to submissions received from stakeholders
- bilateral conversations between ourselves, APA and Lochard Energy.

10.3.1 Interrelationships

Forecast capital and operating expenditure (capex and opex) along with the rate of return and depreciation all impact the overall approved revenue requirement (and tariffs) over the access arrangement. The forecast demand or volume of gas to be transported via the VTS also affects the level of tariffs. This final decision takes these inputs into account.

10.4 Reasons for final decision

For the reasons set out in our draft decision, our final decision is to:

- accept the fundamental features of APA's proposed reference tariffs for the VTS, including tariff design, the zonal tariff structure and the basis for charging users
- accept APA's cost allocation methodology, incorporating inclusion of
    - Western outer ring main (WORM) costs, and
    - changes for South West Pipeline (SWP), storage refill and the Victorian Northern Interconnector (VNI).
    - Prudent discounts (Maryvale zone, Western zone and Dandenong bypass tariff and matched rebates (Latrobe, Lurgi, Tyres and West Gippsland zones).

However, we do not accept the changes made by APA in its revised proposal in response to our draft decision on the application of the cross system tariff.

Our final decision is to retain the methodology in APA's current 2013–17 access arrangement and which it proposed in its initial January 2017 proposal. Under this approach, users that ship gas across the VTS into Iona storage only pay the refill tariff.

We consider this decision reasonably balances the need for simple pricing structures with the requirement for cost reflectivity. The key reasons for retaining the current approach are:

- APA's revised proposal to charge the cross system tariff to all users would result in a significant increase in price to all users transporting gas across the VTS into Iona storage and would result in an over-recovery of cost from most of these users.
- Difficulties in implementing our draft decision to charge the cross-system tariff to only those users who subsequently ship gas from storage on to the SEAGas pipeline.
- The increase in cost to all users for gas going into Iona storage would undermine the incentive to use the storage facility, thus discouraging refill in off-peak seasons.

While our draft decision envisaged a more targeted approach to capture the under-recoveries associated with certain users not paying for the costs of using the VTS, difficulties with implementing such an approach means APA's alternative is likely to be a disproportionate response to correct for this under-recovery, particularly as this is relatively minor and concerns only a small number of users.

These reasons relating to our decision on the cross-system tariff are discussed in more detail below.

Cross system tariff

The cross system tariff applies in addition to the applicable injection and withdrawal tariffs for carriage through the metro zone. It applies for withdrawals off the injection pipeline that are linked to injections at an unrelated injection point.

APA's cost allocation methodology allocates costs to each user in proportion to their use of the transmission system assets and the costs of the assets used to transport gas. A user who transports gas through a short section of the VTS pays a lower amount than one who transports gas through a longer section of the pipeline system. These costs are recovered through APA's injection and withdrawal tariffs.

Flows of gas that cross the VTS and are withdrawn off an injection pipeline and are linked to injections at an unrelated injection point are volatile and difficult to forecast. These flows are not included in APA's cost allocation model as the inclusion of such volatile flows may lead to APA not being able to recover its revenue. The cross-system tariff is, therefore, not derived from APA's cost allocation model.

The cross-system tariff is derived by removing the common costs[12] from the metro zone withdrawal tariff (which is derived in APA's cost allocation model). As the cross-system tariff is not derived within APA's cost allocation model, any revenue recovered from the cross system tariff is an 'over-recovery' of revenue by APA.

APA's current approach of charging for gas shipped across the VTS and into Iona storage

Under APA's current 2013–17 access arrangement, shippers that ship gas across the VTS from Longford or Culcairn and straight into South Australia via the SEAGas pipeline (i.e. do not store gas first) are charged the cross-system tariff. These users therefore pay to use the VTS and are contributing to the costs of using it.

In our draft decision we identified if those same shippers first store gas at Iona and then export it to South Australia, they only pay the refill tariff for putting gas into storage. These shippers are not charged the cross system tariff. Furthermore, they also do not pay any injection and withdrawal tariffs that apply to shippers injecting gas out of Iona storage and back into the VTS. These shippers therefore do not pay to use

[12] Common costs include non-system assets, corporate and administration costs and debt raising costs.

the VTS. It is this under-contribution to VTS costs we sought to address in our draft decision.

This approach to charging only a refill tariff for gas into storage reflects the historical use of two storage facilities (Iona and Dandenong) to encourage refilling of storage capacity in off-peak periods, so as to ensure sufficient gas was in reserve for Victoria's winter peak season.

Issues with AER's draft decision for charging for gas shipped across the VTS into Iona storage

APA's revised proposal noted several issues with our draft decision to charge those users who ship gas across the VTS, into storage and subsequently on to the SEAGas pipeline. Most notable was that APA did not have access to the required metering data. It is the South Australian leg of this journey that APA does not have metered data for, which creates practical difficulties in implementing the charging structure outlined in our draft decision.

The Iona storage connection to SEAGas pipeline is in Iona's compound and not owned or accessed by APA. Lochard Energy, which owns the Iona storage facility, would need to supply this volume data on an ongoing basis. APA expressed concern that its revenue should not depend on what has historically been very volatile private third-party metering data.[13]

Furthermore, aligning billing for Iona refill with South Australian flows may not be possible. APA would not know whether gas should be subject to the cross system tariff until it leaves storage, which may be long after billing. APA advised that monthly billing would not be able to track and effectively allocate the cross system tariff to these volumes.[14]

APA also noted that it would be very difficult to identify whether gas that is sent to South Australia via Iona storage was originally sourced from Longford or Port Campbell. Gas is co-mingled in storage and it is not possible to identify whether gas flowing to South Australia was from Longford to allocate the cross system tariff.[15]

APA's revised proposal for charging for gas shipped across the system into Iona storage

APA's revised proposal to charge the cross system tariff to all users shipping gas from Longford or Culcairn across the VTS and into Iona storage, including:

- those users that later inject gas back into the VTS from the Iona storage facility and
- those users who subsequently export gas to South Australia from the Iona storage facility via the SEAGas pipeline,

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13 APA VTS, Email 04.10.2017
14 APA VTS, Email 31.08.2017
15 APA VTS, Email 31.08.2017

would result in a significant price increase for all these users.

The total charges for users on tariff D would increase from $0.0789/GJ to $0.2401/GJ under APA VTS' revised proposal, an increase of $0.1612/GJ (approximately 200 per cent).

The consortium of users submitted APA's revised proposal increases costs to shippers and would not be fair to those users who re-inject gas back into the VTS.

> While it may seem fair to levy this on gas moving from the VTS through Iona to SEA Gas, it is not fair to Iona gas that is reinjected into the VTS, which attracts withdrawal tariffs such as Metro SE, that also includes all the asset costs covered by the cross-system tariff. Consequently, under the APA revised proposal, Iona gas that is reinjected into the VTS is paying the cross-system tariff asset costs twice and suffers a significant increase in its overall transmission charges.[16]

CCP11, however, supported APA's revised proposal

> The principle of 'user pays' has been agreed by the AER and APA as being the appropriate basis for setting tariffs. This view should be maintained, and carried into the AER's Final Decision. It is the view of the CCP11 that the current tariff proposal from APA in its Revised Proposal seems the best option to meet this principle. It appears to be fair, simple to apply, and with low risk of gaming.[17]

In its revised proposal APA notes that broader application of the cross system tariff to all Iona refill volumes would support the user pay principle. This is because it is these flows that have increased the peak needs for westbound flows on the SWP that have driven the WORM project.[18]

In our draft decision we accepted the inclusion of WORM costs into APA's standard cost allocation methodology. As described above, costs allocated through APA's cost allocation model are recovered through APA's withdrawal and injection tariffs according to the relevant flow paths in proportion to volume. Under this allocation methodology WORM costs are primarily recovered through the metro and Calder zone tariffs.

The cross system tariff reflects the metro tariff without common costs and so charging the cross system tariff to all users shipping gas across the VTS would signal the cost of using the VTS. However, we consider for users that inject gas back into the VTS from Iona storage (which is most users) are already paying for the use of the pipeline system. This means this significant price increase would outweigh the benefits from removing the subsidy for those smaller number of users exporting to South Australia from Iona storage that we initially intended to address in our draft decision.

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16 Consortium of VTS Users, *Submission to AER Draft Decision and APA Revised VTS AA 2018-2022*, September 2017 p.9

17 CCP11, Final advice, 12 September 2017, p.51.

18 APA VTS - *Access Arrangement revision proposal submission* - 20170814 - Public, p. 104

Data provided to us from Lochard Energy, subsequent to our draft decision, indicates that the volume of gas shipped across the system into Iona storage and subsequently on to the SEAGas pipeline is small and highly volatile.[19] Any subsidy to users shipping gas across the system, into Iona storage and subsequently to South Australia from users returning gas to the VTS from storage is therefore small.

In its revised proposal, APA submitted that all revenue recovered through the cross system tariff is returned to customers through operation of the price control model, APA earns no additional revenue from the application of the cross system tariff to Longford sourced injections.[20]

Although APA earns no additional revenue from the cross system tariff, those customers injecting back into the VTS would not see a corresponding reduction in charges consistent with the increased costs incurred through the cross system tariff.

Revenue recovered through the cross-system tariff is paid back to all VTS users through the annual tariff variation mechanism by reducing the target revenue in later years of the period. However, this reduction in target revenue is allocated across all APA's tariffs in the following year, reflecting the proportions of APA's costs and volumes associated with each tariff zone. We assess this each year as part of our tariff compliance assessment.

This means those users who inject back into the VTS from storage will benefit from a reduction in tariffs in the following year. However, it will not be equivalent to the increase in cost from charging the cross-system tariff in addition to the refill tariff.

While APA's revised proposal would not lead to an over recovery of revenue in aggregate, it would nevertheless mean a significant increase in charges to those users re-injecting back into the VTS from storage.

The consortium of users suggested three options to address its concern regarding increase costs to those users injecting back into the VTS, including reverting to APA's original proposal, in which the cross system tariff was not applied to any Iona refill gas (i.e. to apply the current access arrangement)[21]. The consortium also suggested:

- to retain the cross-system charge on Iona refill and give the shippers of that gas a refill certificate to the value of the cross-system tariff, which would be redeemable against any VTS charge against that gas when it is re-injected into the VTS
- remove the cross system tariff on Iona refill and balance the revenue by increasing the Iona refill tariff.[22]

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19 Lochard Energy, email, 16.10.2017

20 APA VTS - *Access Arrangement revision proposal submission* - 20170814 - Public, p. 104-105.

21 Consortium of VTS Users, *Submission to AER Draft Decision and APA Revised VTS AA 2018-2022*, September 2017, p.9

22 Consortium of VTS Users, *Submission to AER Draft Decision and APA Revised VTS AA 2018-2022*, September 2017, p.9

We considered both these alternative suggestions. However, we are concerned that the implementation of refill certificates would have the similar difficulties to those identified by APA on our draft decision. In particular, temporal limitations and identifying whether gas flowing from storage to South Australia was from Port Campbell or Longford.

We also considered that increasing the refill tariff would not directly address the issue of 'user pays' for shipping gas across the VTS. Any extra costs recovered (and therefore tariffs paid) for use across the VTS could discourage the efficient filling of gas into Iona storage from Port Campbell. A similar concern is also relevant to APA's revised proposal. The charging of the cross system tariff in addition to the refill tariff could undermine the incentive to refill storage capacity in off-peak seasons as was initially intended.

Given recent gas market dynamics and wholesale gas price increases, we consider that the near 200 per cent increases that would result from APA's revised proposal would not be in the interests of Victorian gas users.

While the user pay principle is more directly applied under APA's revised proposal, we consider in this case the application of user pays will not lead to material improvements to the efficient use and investment of the Victorian transmission system or the Iona underground gas storage facility.

The volumes of gas shipped across the VTS from Longford and Culcairn into storage and subsequently to South Australia is still small and volatile. Removing the subsidy associated with these small volumes would result in significant price increases for other users. Therefore, we consider continuation of the current 2013–17 access arrangement pricing methodology best balances the user pays principle, use of Iona storage and future price impacts.

In the event that gas volumes from Longford and Culcairn injected into Iona storage and subsequently exported to South Australia via the SEAGas pipeline grow and become more stable, we consider measures to address this should be included in APA's cost allocation methodology in future access arrangement periods.

A Cross-system tariff summary of charging approaches

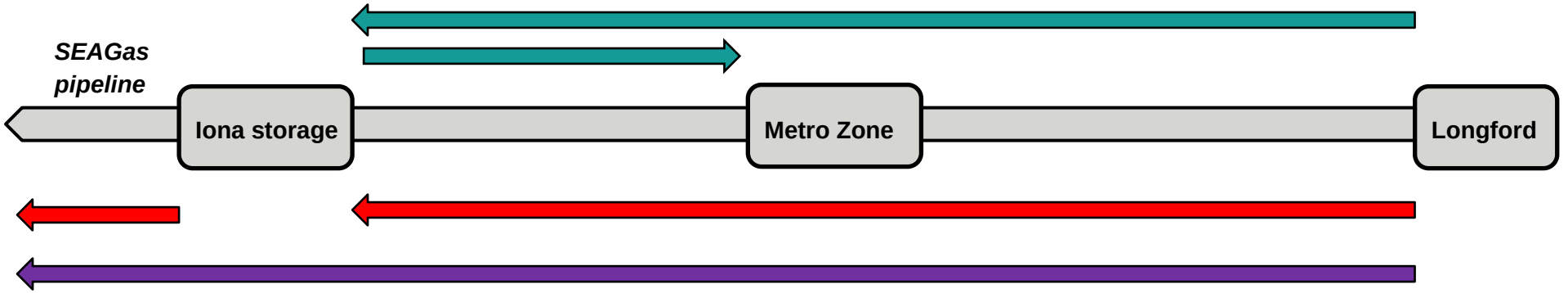
Flows across VTS into storage and back into the VTS

Current Access arrangement = **[into storage = Iona refill $0.0789/GJ] + [out of storage into VTS = injection and withdrawal tariffs]**

AER Draft decision = **[into storage = Iona refill $0.0789/GJ] + [out of storage into VTS = injection and withdrawal tariffs]**

APA revised proposal = **[into storage = Iona refill ($0.0789/GJ) + cross system tariff D ($0.1612/GJ) = $0.2401/GJ] + [out of storage into VTS = injection and withdrawal tariffs]**

AER Final Decision = **[into storage = Iona refill $0.0789/GJ] + [out of storage into VTS = injection and withdrawal tariffs]**



Flows into storage and then on to the SEAGas pipeline

Current Access Arrangement = **Iona refill $0.0789/GJ**

AER Draft decision = **Iona refill ($0.0789/GJ) + Cross system tariff-D ($0.1612/GJ) = $0.2401/GJ**

APA revised proposal = **Iona refill ($0.0789/GJ) + Cross system tariff-D ($0.1612/GJ) = $0.2401/GJ**

AER Final Decision = **Iona refill $0.0789/GJ**

Flows across VTS straight on to SEAGas pipeline

Current Access Arrangement = **Cross system tariff-D = $0.1612/GJ**

AER Draft decision = **Cross system tariff-D = $0.1612/GJ**

APA revised proposal = **Cross system tariff-D = $0.1612/GJ**

AER Final Decision = **Cross system tariff-D = $0.1612/GJ**