Infrastructure Rebates and GAPE RCS Draft Amending Access Undertaking

7 June 2024

Submission to the Queensland Competition Authority

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1. Executive Summary

Aurizon Network has commenced its planning for the UT6 development and expects to commence detailed engagement and negotiation with its customers in FY25. As a result, Aurizon Network is seeking to limit engagement on amendments to the current undertaking to circumstances which are more procedural in nature and do not represent significant policy changes.

This draft amending access undertaking (**RCS and AFD DAAU**) seeks QCA approval to implement the following variations:

- the inclusion of the previously deferred Remote Control Signalling (**RCS**) investment on the Goonyella to Newlands Connection in the GAPE Reference Tariff from 1 July 2024; and

- apply the economic benefit of mine specific infrastructure funding provided by nominated Access Facilitation Deeds (**AFD**) as a discount to their Access Charge payable as a reasonable and efficient alternative to rebating that benefit from Access Charges paid.

All capitalised terms in this submission are with reference to definitions in Aurizon Network's 2017 Access Undertaking (**UT5**).

RCS Investment on Goonyella to Newlands Connection

The intent to include the prior RCS investment on the Goonyella to Newlands Connection in the GAPE Reference Tariff was communicated in the FY25 Annual Review of Reference Tariff (**FY25 ARRT**) submission. That submission also included projected System Allowable Revenue and Reference Tariff impacts resulting from this change.

Aurizon Network has previously informed GAPE Customers of the intention to cease the capital deferrals of the RCS investment on the Goonyella to Newlands Connection to coincide with the inclusion of the RCS investment between Collinsville and the Newlands Junction. The QCA received no submissions in response to the FY25 ARRT in response to this matter.

Rebates on AFD Funded Rail Transport Infrastructure

The proposed changes to the way in which the economic benefit of funding mine specific infrastructure pursuant to an AFD for nominated customers arises from an AFD Access Holder exercising an existing contractual right under its AFD to ensure the rebate arrangements appropriately reflect the relevant regulatory principles in the Access Undertaking, including that AFD Access Holders are not disadvantaged or unfairly differentiated relative to Private Infrastructure Owners.

Aurizon Network has reviewed the equivalence of rebates on Access Charges paid and discounts on Access Charges payable and concluded that an AFD Access Holder is disadvantaged relative to a Private Infrastructure Owner in the same circumstances.

Aurizon Network has also engaged all affected AFD Access Holders, informed them of this conclusion and sought expressions of interest on preferences to obtaining the economic benefit of their funded mine specific infrastructure through a discount to their Access Charge or continuing to receive that benefit as a rebate on the Access Charges paid.

Due to the remaining term or quantum of the rebate, some AFD Access Holders may not consider the difference between the two approaches as sufficiently material to change their current arrangements. This DAAU adjusts the Reference Tariff Inputs for those AFD Access Holders who have expressly requested a preference for alignment with Private Infrastructure Owners.

2. Remote Control Signalling on Goonyella to Newlands Connection

Aurizon Network's submission on the FY25 ARRT noted that following completion of the Transitional Arrangements associated with the installation of Remote-Control Signalling between Collinsville and the Newlands Junction, it would be necessary to cease the deferred recovery of the prior investment in RCS on the Goonyella to Newlands Connection (**GAPE Link**).

As the material benefit from the prior GAPE Link investment was dependent on full installation of RCS in the Newlands System, the QCA approved the deferral of the recovery of this prior investment in the UT4 Final Decision.

The UT4 Final Decision states[1]:

> *"Aurizon Network maintains that the full benefits of GAPE RCS (which we approved as part of Aurizon Network's 2013-14 capital expenditure claim) will only be realised after all RCS works in the Newlands system have been completed and, for this reason, the GAPE portion of this expenditure should be deferred."*
>
> *"We accept Aurizon Network's argument that $11.6 million of GAPE RCS expenditure from 2013–14 should be deferred (for pricing purposes)."*

The completion of the installation of RCS between Collinsville and the Newlands Junction requires an end to the deferral of the GAPE Link RCS investment and its inclusion in GAPE Allowable Revenues and Reference Tariffs from FY2025. The carried forward value of the GAPE Link RCS expenditure to be included in the GAPE Reference Tariff as of 1 July 2024 is $23.6 million.

The FY25ARRT noted:

- the provisions in Schedule F for the Annual Review of Reference Tariffs do not provide for the adjustment of the Allowable Revenue associated with the cessation of a capital deferral; and
- it would be necessary to submit a subsequent Draft Amending Access Undertaking (DAAU) to vary FY2025 Reference Tariffs to incorporate the RCS investment on the GAPE Link into GAPE Reference Tariffs.

The QCA did not receive submissions from stakeholders in respect of the cessation of the deferral of the GAPE Link RCS capital investment and the prospective changes to both the GAPE System Allowable Revenue and Reference Tariffs.

This DAAU includes the value of the GAPE Link RCS in the GAPE Reference Tariff with the following consequential changes to Schedule F as detailed in Table 1 and Table 2. The revenue increase from the GAPE Link RCS is circa $2.8 million per annum as per FY25. The additional revenue variations in FY26 and FY27 reflect other adjustments approved as part of the FY25ARRT, including the Newlands RCS capital indicator.

[1] QCA (2016) Final Decision: Aurizon Network 2014 Access Undertaking – Vol. IV Maximum Allowable Revenue, April, p. 182.

Variations to the GAPE Allowable Revenue and Reference Tariff Components.

Table 1 Variation to Schedule F Clause 11.3 Gtk Forecast and Allowable Revenues

Year	Gtk Forecast (,000 gtk)	Allowable Revenue – $AT_{2\text{-}4}$ ($000)
2022/23[1]	9,682,695	107,815
2023/24[1~]	8,991,152	142,253
2024/25[1]	8,572,032	~~130,706~~ 142,616
2025/26	~~8,991,152~~ 8,572,032	~~134,135~~ 141,442
2026/27	~~8,991,152~~ 8,572,032	~~114,111~~ 121,301

Table 2 Variation to Schedule F Clause 11.2(a) Reference Tariff inputs

Reference Tariff input	2022/23^ ($)	2023/24^~ ($)	2024/25^ ($)	2025/26 ($)	2026/27 ($)
AT_1	1.57	1.62	1.66	1.71	1.76
AT_2	15,464.32	15,464.32	15,464.32	15,464.32	15,464.32
AT_3	0.17	1.55	1.58	~~1.39~~ 1.57	~~1.41~~ 1.57
AT_4	1.05	3.28	~~3.30~~ 3.56	~~2.85~~ 3.49	~~1.68~~ 2.29
QCA Levy	0.00866	0.0058**	0.0042	0.0063	0.0063
IE Fee	0.01868	0.0164	0.0126	0.0164	0.0164

3. Discounting Access Charges for Infrastructure Rebates

Following the completion of the 2022-23 Revenue Adjustment Amounts process, Aurizon Network held discussions with a party to an AFD that was executed during the term of the 2001 QR Access Undertaking. Discussions related to the alignment of the rebate formulas with the prevailing regulatory arrangements and principles. This included whether there was a discrepancy between the arrangements which applied to new entrants who directly fund and own Rail Transport Infrastructure connecting their mine loading facilities to the Central Queensland Coal Network (**CQCN**) and existing customers who indirectly funded similar Rail Transport Infrastructure owned by Aurizon Network through an AFD.

The underlying objective of an AFD was outlined in clause 6.4.1(b) of the 2001 QR Access Undertaking which included the requirement that:

> *QR may require from an Access Seeker an upfront contribution as a pre condition to being granted Access Rights, where this is reasonably required in order to mitigate QR's exposure to the financial risks associated with project specific Capacity enhancements required to facilitate Access for that Train Service. In this event, QR and the Access Seeker will negotiate an agreement (separate from the Access Agreement) for such contribution to be rebated to the Access Seeker over a term that shall be equal to the average life assigned to the asset(s) for the purposes of calculation of the relevant Access Charge or Reference Tariff as the case may be, or such other period as the parties agree, and amortised at a discount rate equivalent to the ROA that would be applied for the purpose of assessing a revenue limit for that Train Service in accordance with Subclause 6.2.4. Such agreement will detail the circumstances in which the rebate may vary over the term.*

Importantly, it was also intended that the rebate may vary over the term of the AFD to reflect changes in circumstances. In this regard, Aurizon Network notes and agrees with the comments in Glencore's submission to the FY25 ARRT that it has '*the right to request a review of the Rebate Deed given the changes in the Undertaking since UT1*'.

In summary, Glencore's submission to the FY25 ARRT articulates that:

- Private Infrastructure Owners obtain an indirect benefit of having take or pay calculated with reference to an Access Charge which has been discounted from the System Reference Tariff;
- AFD Access Holders, given the similar economic characteristics of user funded Rail Transport Infrastructure, could receive the economic benefit of their funding contribution as a discounted Access Charge to the System Reference Tariff;
- such an outcome is required to ensure alignment of rebate arrangements with relevant regulatory principles underpinning the provision of discounted Access Charges for Private Infrastructure Owners; and
- having regard to relevant provisions for the revision of the rebate formulas and methodologies in its AFD, the QCA should provide guidance on whether an AFD Holder receiving the economic benefit of its capital contribution by way of a discount to the Access Charge is not inconsistent with the principles contained in UT5.

As the issues raised by Glencore are common to other AFD Access Holders, Aurizon Network has undertaken engagement with all affected AFD Access Holders on the relevant issues raised in this DAAU and sought their interest in obtaining the economic benefit of their capital contribution as a discount to their Access Charge payable as opposed to a rebate payment in respect of Access Charges paid.

3.1 QCA Prior Consideration of Rebate Discounts

Aurizon Network has previously sought to implement alternate arrangements to the payment of rebates on mine specific infrastructure in the Aurizon Network 2013 Draft Access Undertaking (**2013DAU**). The 2013DAU proposed to apply all rebates to mine specific infrastructure as a discounted Reference Tariff and cease the payment of rebates. The key objectives of this proposal were to:

- reduce administrative costs and inefficiencies in the way in which the economic benefit for capital contributions was provided; and
- alleviate the requirement for rebate adjustments through the revenue cap provisions associated with either the under or over payment of rebates.

The QCA Draft Decision did not support the proposed changes on the basis that:

> *We remained unconvinced that the proposed discount leads to an equivalent outcome to the existing rebate arrangements. Rebates provide transparency for refunding the capital charge associated with contributed assets, and consistency for single and multi-user spurs.*

It was not necessary for the QCA to consider the matter of discounted Access Charges for AFD funded Rail Infrastructure in its Final Decision on UT4 as Aurizon Network withdrew its proposal following the QCA Draft Decision.

Aurizon Network considers there are substantive differences between circumstances associated with the 2013DAU and this GAPE RCS and Infrastructure Rebate DAAU. These differences include:

- the 2013DAU was not subject to extensive engagement with affected AFD Access Holders and consequently was not supported by way of submissions from those parties. Aurizon Network has directly engaged all affected AFD Access Holders in the consultation on the GAPE RCS and Infrastructure Rebate DAAU.
- the 2013DAU sought to apply a discounted Access Charge to all rebates on mine specific infrastructure. The GAPE RCS and Infrastructure Rebate DAAU only seeks to apply a discounted Access Charge for rebates on mine specific infrastructure for which the AFD Access Holder has expressly endorsed obtaining the economic benefit of its capital contribution by way of a discount to their Access Charge. That is, the alternate approach is strictly voluntary and at the discretion of the AFD Access Holder. In this context, an AFD Access Holder will only support the change where they consider there is a material discrepancy to the arrangements prevailing for Private Infrastructure Owners.
- The QCA considerations on other aspects of the recognition of rebates in the 2013DAU changed substantially from the Draft Decision to the Final Decision with the QCA accepting the retention of mine volume risk in respect of mine specific infrastructure:

  > *We consider the new information provided by Aurizon Network in support of its 2014 DAU proposed treatment of rebate adjustments to be reasonable. That is, other system users should not compensate a non-railing or under-railing AFD holder for the amount of its rebateable assets, and conversely should not benefit from an over-railing AFD holder.*

- The increased number of Private Infrastructure Owners has made discounted Access Charges a more prominent feature of access pricing in the CQCN and provide a higher level of transparency than rebates as the contribution to common costs being made by the Private Infrastructure Owner is reflected in the discounted Access Charge.

- Amendments to the definition of Private Incremental Costs in the Meteor Downs South DAAU recognised the equivalence of rebates and discounts by providing for the inclusion of connecting infrastructure owned by Aurizon Network and funded by way of capital contribution in the calculation of the discount to the Access Charge payable.

A key challenge with implementing changes to pricing frameworks through a Draft Access Undertaking process is the ability for stakeholders and the regulator to evaluate individual changes at a level of detail which is afforded by a DAAU which has a significantly narrower scope of changes.

In preparing the GAPE RCS and Infrastructure Rebate DAAU, Aurizon Network has undertaken and is able to provide more detailed analysis of the impact of discounts to Access Charges as an alternative to rebate payments than was provided in the 2013DAU.

3.2 QCA Commentary in FY25ARRT Decision

The QCA's Final Decision on the FY25ARRT acknowledges the concerns raised in the Glencore submission. However, the QCA also states:

> *We consider that any proposal to change longstanding infrastructure rebate arrangements under UT5 are best dealt with in a process separate to this annual review of reference tariffs. Such a proposal would be instigated between Aurizon Network and the parties affected (potentially not limited to Glencore).*

This DAAU has been prepared following consultation with all affected AFD Access Holders as an appropriate process to address the matters in the Glencore submission.

3.3 Overview of AFD Arrangements and the Revenue Cap

Aurizon Network considers the first step in evaluating the impact of a proposed change is to provide an overview of the current arrangements. As not all Access Holders are a party to, or are familiar with, an AFD, it is instructive to provide a brief explanation.

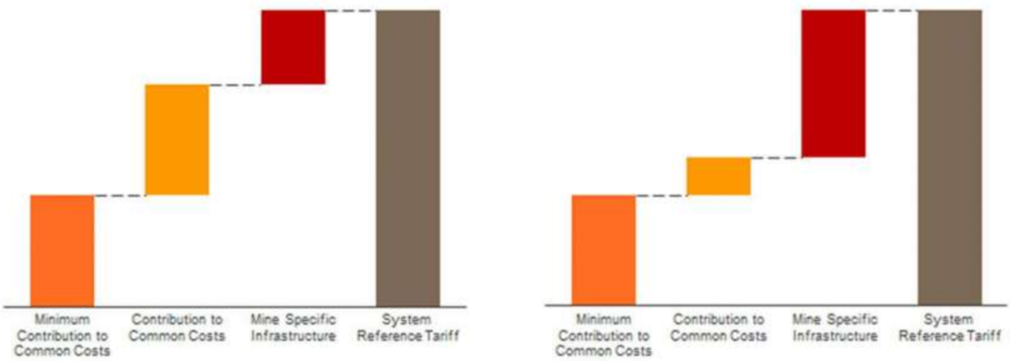
The Access Charges payable by all coal carrying Train Services in the CQCN comprise the following three components:

1. A minimum contribution to common costs (the effective floor price for coal carrying train services);
2. An additional contribution to common costs; and
3. The recovery of costs which are specific to the mine (typically mine spurs and connecting infrastructure).

The amount an individual mine contributes to common costs within a coal system is dependent on the materiality of the mine specific costs. As shown in Figure 1, subject to the Access Charge being no less than the minimum contribution to common costs, the more significant the mine specific costs, the lower the contribution to common cost embedded in the Access Charge.

Figure 1 Variation in Contribution to Common Costs with Mine Specific Infrastructure Cost

(a) Low Mine Specific Costs (b) High Mine Specific Costs



The mine specific costs vary between Access Holders in respect of how those assets were funded and fall broadly, but not exclusively, into one of the following three categories:

1. Mine specific Rail Infrastructure constructed prior to the commencement of the 2001 QR Access Undertaking and the establishment of the CQCN Regulatory Asset Base. These investments are funded through Access Charges from all users;

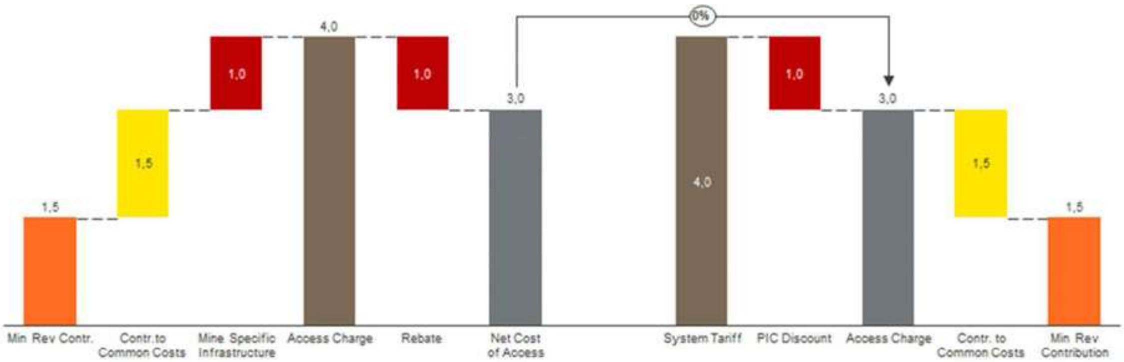
2. New mine specific Rail Infrastructure owned by Aurizon Network, particularly new Rail Infrastructure, which was funded by the customer through an AFD; and

3. New mine specific Rail Infrastructure which is privately owned by the customer connecting their loading facilities to the CQCN.

In practice the expected net cost of access between an AFD Access Holder and the Private Infrastructure Owner is equivalent as shown in Figure 2. As the rebate payment matches the Private Incremental Cost (**PIC**) discount, then the Access Charge less the Rebate is equivalent to the Discounted Access Charge.

Figure 2 Indicative Comparison of Net Cost of Access between AFD Access Holder and Private Infrastructure Owner

(a) AFD Access Holder (b) Private Infrastructure Owner

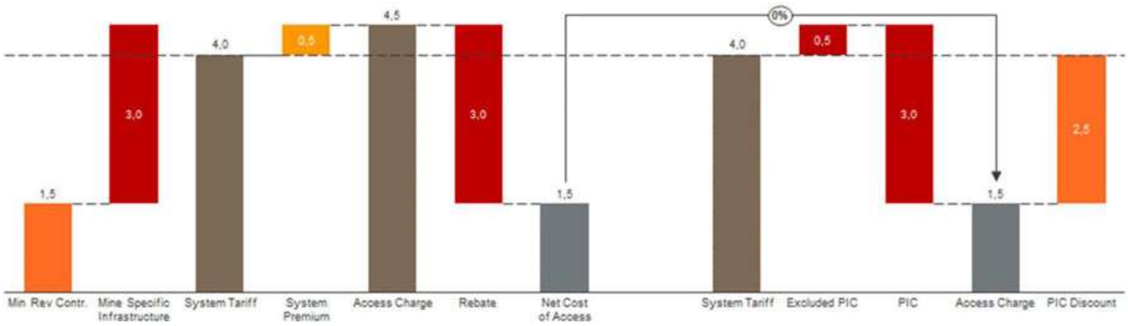


In a scenario where the mine specific infrastructure is material, the equivalence is maintained through the capping of the discount so that the Access Charge is no less than the Minimum Revenue Contribution (**MRC**). For an AFD Access Holder, it would not pass the relevant system test and would be subject to an increased Reference Tariff through the application of a system premium. However, the rebate amount would reduce the net cost of access to the MRC which is equivalent to the PIC Access Charge in the same circumstances as shown in Figure 3.

Figure 3 Indicative Comparison with System Premium

(a) AFD Access Holder

(b) Private Infrastructure Owner



An AFD rebate and Private Infrastructure discount are determined in the same manner. The allowable revenue for AFD Rail Infrastructure and Private Infrastructure is determined using the same underlying assumptions of:

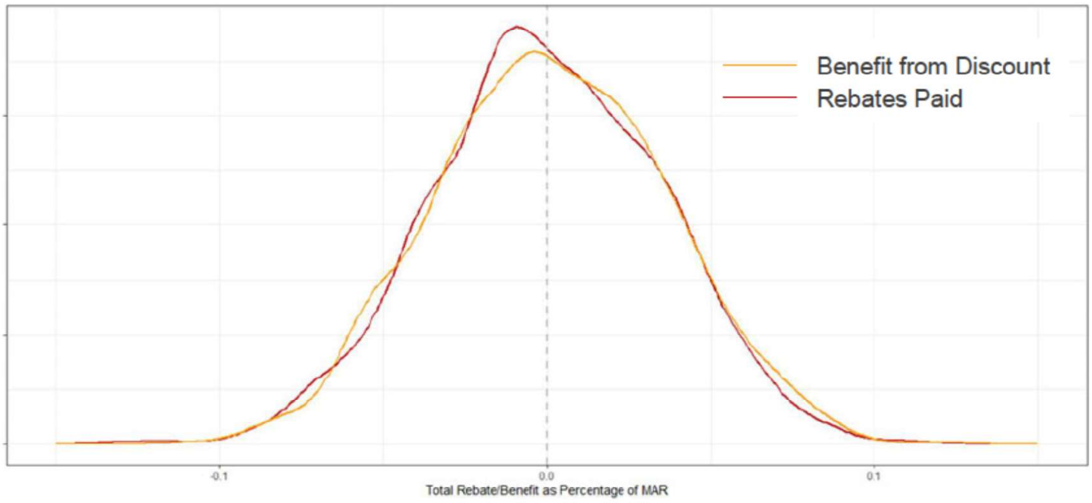
- an asset value based on the amounts approved by the QCA (either through its inclusion in the RAB or through the approval of the Private Incremental Costs);
- the Approved WACC; and
- the QCA endorsed asset lives.

Consequently, both the rebate and the discount are then a function of the allowable revenue for the relevant assets divided by the forecast volumes approved by the QCA in the approval of the System Reference Tariffs for that year. The total amount of rebate paid or cumulative discount benefit obtained is then a function of the actual railings relative to the forecast volume. In both circumstances where the mine under-rails (over-rails) relative to the volume forecast then the rebate/benefit will be less (greater) than the allowable revenue. A Private Infrastructure Owner obtains the additional benefits which are then more than the allowable revenue attributable to the Private Incremental Costs as it continues to be charged the discounted Access Charge on railings above the volume forecasts.

Where the volume forecasts used to obtain the rebate amount or the discount are unbiased estimates then the expected outcome is that there is equal probability of the total amount of rebate paid or cumulative discount benefit obtained being more or less than the allowable revenue. Therefore, while the total amount of rebate paid or cumulative discount benefit obtained may be more or less than the allowable revenue in a given year, over the long term the AFD Access Holder and the Private Infrastructure owner would expect to obtain the economic benefit of the funded Rail Infrastructure (i.e. NPV = 0).

Aurizon Network has undertaken simulations of the total amount of rebate paid or cumulative discount benefit obtained by a Private Infrastructure Owner to demonstrate the equivalence of the economic benefit under both circumstances. Holding all things equal, where take or pay is not payable, the two amounts are the same in each circumstance as shown in Figure 4.

Figure 4 Variation of Rebates Paid and Cumulative Discount Obtained from Under or Over-railing Against Forecast as a Percentage of the Relevant Allowable Revenue[2]



The impacts of an over or underpayment of rebates to Aurizon Network is also comparable. For example, where an AFD Access Holder or a Private Infrastructure Owner's railings exceed the volume forecast, then:

- the overpayment of rebates are recovered from other system users through adjustments to the Revenue Adjustment Amount (**Revenue Cap**) arrangements; and
- the additional benefit obtained by the Private Infrastructure Owner does not impact the allowable revenue.

Therefore, Aurizon Network is indifferent to whether the economic benefit to an AFD Holder is provided by way of a rebate of Access Charges paid or through a discount applied to the Access Charges payable.

While not an immediately obvious conclusion, other system users are also indifferent to the two approaches as:

- the over or underpayment of rebates will be transferred between the AFD Access Holder and all system users ***directly*** through adjustment to the allowable revenue in the Revenue Cap arrangements;
- the over or under-railing of a Private Infrastructure Owner will effectively adjust the contribution to common costs that the Private Infrastructure Owner pays in Access Charges[3] such that all system users are ***indirectly*** impacted through Total Actual Revenue amounts applied in the Revenue Cap arrangements.

[2] 2000 simulated normally distributed random actual railings from forecast volumes where 1 standard deviation is 3% from volume forecast.

[3] For example, if a Private Infrastructure Owner under-rails (over-rails) then it will pay a higher (lower) contribution to common costs per service than what it would have if a lower (higher) forecast had been used to calculate the discount.

3.4 Misalignment of Rebates with PIC Discounts

The analysis and discussion in the previous section was predicated on the System Gtk meeting or exceeding the Forecast Gtk, or at a level below System Forecast such that the take or pay is not payable within the relevant year. Therefore, the rebate paid or the cumulative discount benefit is a function of the mine actual railing against the volume forecast. As was shown in Figure 4, this is an unbiased symmetrical distribution in both circumstances.

In the majority of AFD agreements, the rebates are determined solely with the system volume forecast and the actual volumes railed. That is, additional rebates are not paid on any subsequent take or pay amounts. This would result in an asymmetric distribution and potentially lead to an AFD Access Holder being paid additional rebates where it has already received rebates equating to, or in excess of, the allowable revenue attributable to the AFD assets if its actual volumes meet or exceed the volume forecast.

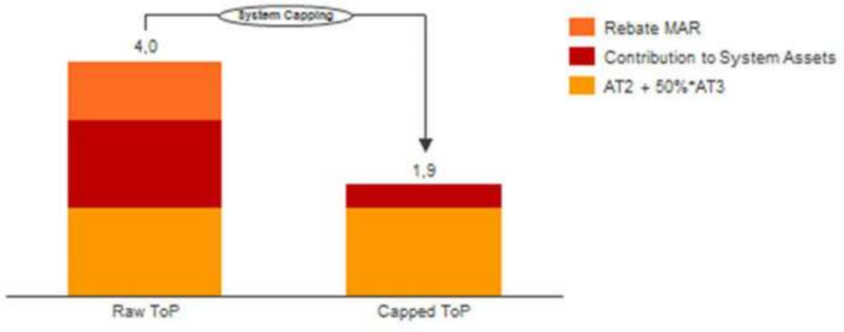
Therefore, the payment of rebates on take or pay would provide an expected return on the AFD assets in excess of the NPV=0 assumption. These excess payments would also be *directly* funded by other users in the relevant system. Consequently, in order to satisfy the NPV=0 assumption, it would be necessary to account for the probability of rebates on take or pay in the setting of the rebate payment per tonne. This would be highly subjective and complex relative to the simple assumption that the volume forecast is unbiased and that the NPV=0 test is satisfied on an expectations basis on rebates applying railed tonnes.

Some earlier AFD agreements provide for the payment of rebates on take or pay where the take or pay relates to the AFD assets. To ensure alignment and consistency with later AFD agreements, where rebates are not payable on take or pay, Aurizon Network would only pay a rebate where the total take or pay amount exceeds the contribution to common costs such that there is take or pay amounts attributable to the AFD Assets.

In addition, as take or pay is not payable on the use of electric traction infrastructure, the non-payment of rebates on take-or-pay for track assets replicates the same expected distribution of rebate outcomes for both electric and non-electric assets.

Under system capping, and depending on the relativity of the forecast volumes to contract volumes and the difference between actual volumes and the forecast, an access holder's take or pay amounts are expected to be materially less than the uncapped take or pay amounts. In capping the take or pay amounts, Aurizon Network assumes those amounts are initially attributable to the common costs and where an AFD provides for a rebate on take or pay, the rebate would only be payable on amounts above those attributable to common costs. In the indicative example shown in Figure 5, the capped take or pay amount does not cover the contribution to common costs and no take amounts can be attributed to the AFD assets (and a rebate would not be payable on any capped take or pay amounts).

Figure 5 Attribution of Take or Pay under System Capping



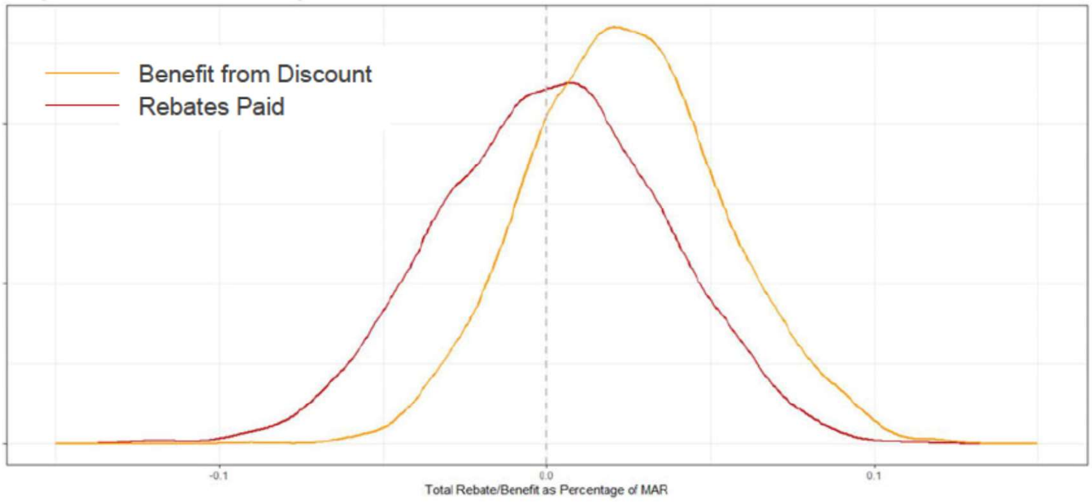
While the exclusion of rebates on take or pay amounts is a necessary condition for the NPV=0 assumption to be satisfied, it results in a differential benefit to Private Infrastructure Owners. This difference arises from the fact that prior to application of system capping the take or pay amounts payable by a Private Infrastructure Owner are calculated with reference to the discounted Access Charge. In contrast, the take or pay amounts for the AFD Access Holder are payable on an undiscounted System Reference Tariff.

In contrast to the circumstance where other system users would be required to directly fund the excess rebate payments through an increase in the maximum allowable revenue and higher prices, there is no direct cost to other system users from Private Infrastructure Owner's take or pay being calculated with reference to a discounted Access Charge. This is because there is no variation in the maximum allowable revenue. This isn't to say there is no impact on other system users, only that the impact is indirect through an expected cumulative lower contribution to common costs that would be made by the Private Infrastructure Owner.

The additional benefit accruing to a Private Infrastructure Owner can be shown by repeating the simulations from Figure 4 but on the assumption that the System Gtk is less than the Forecast Gtk and take or pay is triggered. The discrepancy between AFD Access Holders and Private Infrastructure Owners is evident in Figure 6 where the System Gtk is 97.5% of the Forecast Gtk. The distribution of expected payments to the AFD Holder for over or under railing against its forecast volumes is unchanged.

In contrast, when the cumulative benefit from the discounted Access Charges includes the avoided take or pay amounts that are payable by an AFD Access Holder in the same circumstances, there is a clear difference in expected outcomes.

Figure 6 Variation of Rebates Paid and Cumulative Discount Obtained from Under or Over-railing Against Forecast as a Percentage of the Relevant Allowable Revenue with Take or Pay



The above distribution arises only due to take or pay amounts and therefore there is no discrepancy between AFD Access Holders and Private Infrastructure owners with respect to electrical infrastructure.

3.5 Options to Achieve Equivalence between AFDs and PICs

Aurizon Network notes this differentiation is a consequence of take or pay capping with system forecast demand. Under contract volume pricing, it would likely be necessary to pay rebates on take or pay to satisfy the NPV = 0 assumption and the distribution of expected outcomes/benefits between an AFD

Access Holder and a Private Infrastructure would be similar. However, as this approach has broader implications for all Access Holders within the CQCN, it is not an option considered for this DAAU.

Aurizon Network has considered what options can promote greater equivalence between an AFD Access Holder and a Private Infrastructure Owner. These options include:

1. Calculate the take or pay for Private Infrastructure Owners with reference to the System Reference Tariff;

2. Calculate the take or pay for an AFD Access Holder with reference to only the common cost component of the Access Charge (i.e. system reference tariff less rebate);

3. Pay rebates to an AFD Access Holder on the capped Take or Amounts in proportion to the AFD asset component of the access charge; or

4. Provide the rebate as a discount to the Access Charge payable.

Options 1 and 2 are not preferred as both involve differential pricing for the purpose of access charges and for take-or-pay and would require substantive revisions to the pricing and revenue cap arrangements to implement. In addition, there would be greater complexity and reduced transparency in the calculation of take or pay amounts.

Option 3 is also not preferred as it is explicitly incompatible with the NPV=0 assumption without accounting for the expected overpayments of rebates where take or pay triggers. To achieve neutrality and equivalence between an AFD Access Holder and a Private Infrastructure Owner, it would also be necessary to account for the additional benefits to a Private Infrastructure Owner in setting the discount on the access charge. This would be a highly complex and subjective exercise requiring probabilistic based estimates and adjustments.

Option 4 is the preferred approach and represents the simplest and most effective way of promoting equivalence between AFD Access Holders and Private Infrastructure Owners. In addition, and for the reasons outlined in the following section this would improve alignment of the interest of AFD Access Holders and Private Infrastructure Owners in respect of other mine specific infrastructure in common user Access Charges.

3.6 Impacts on other Stakeholders

As was shown in Figure 1, all Access Holders are expected to make differing levels of contribution to common costs associated with the cost of their mine specific infrastructure. This premise is also true for Access Holders who are not AFD Access Holders or Private Infrastructure Owners. In addition, the actual contribution that each Access Holder makes to common costs is dependent on their actual railings relative to their forecast volumes. In contrast to AFD Access Holders and Private Infrastructure Owners, these outcomes are not individually accounted for in the revenue cap and socialised system pricing.

Aurizon Network acknowledges that, notwithstanding the lower administrative burden of discounted Access Charges, it is indifferent as to whether the economic benefit of an AFD Access Holder is returned as a rebate of Access Charges paid or as a discount to the Access Charge payable. This arises because any under or over payment of the rebate is recoverable from or returned to all Access Holders respectively.

An advantage of the discount to the Access Charge payable is that it would avoid direct transfers between an AFD Access Holder and all Access Holders through the revenue cap mechanism.

On balance, Aurizon Network does not consider the proposal to apply the economic benefit to AFD Access Holder as a discount to the Access Charge payable to have any substantive adverse impact to other system users due to:

- the relative symmetrical positive and negative impacts;
- the immateriality of those impacts; and
- the recognition of the implicit cost to AFD Access Holders of paying take or pay on a system reference tariff inclusive of other Access Holder's mine specific infrastructure.

Symmetry of Impacts

To assess the impact on other system users, Aurizon Network has evaluated an indicative scenario to compare the impacts on take or pay amounts payable by other Access Holder's between:

- a rebate on access charges paid; and
- a discount on the access charges payable.

This scenario is generally representative of a larger user funded mine specific infrastructure applying the following inputs:

- System Allowable Revenue = $327.8 million;
- System Forecast volumes = 85% of Contract Volumes;
- AFD Allowable Revenue = $7.3 million; and
- AFD Access Holder Forecast volumes = 85% of Contract Volumes.

The scenario analysis compares the take or pay amount payable by the non-AFD Access Holder for different levels of system and mine volumes relative to the forecast volumes. This analysis shows that there is no impact on the take or pay amounts payable by non-AFD Access Holders where the AFD Access Holder utilisation rate and the system utilisation rate are the same. However, the benefit may be positive or negative depending on the relativity of the Access Holder utilisation rate and the system utilisation rate. The results of this analysis are shown in Figure 7.

Figure 7 Variation in non-AFD Access Holder Take or Pay Amounts with Discounted Access Charge

			AFD Access Holder Utilisation Rate								
	Dev. from F.cast		**-0.05**	**-0.04**	**-0.03**	**-0.02**	**-0.01**	**0**	**0.01**	**0.02**	**0.03**
		-	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88
System Utilisation Rate	**-0.05**	0.80	-	- 61,590	- 123,488	- 185,691	- 248,200	- 311,013	- 374,131	- 437,553	- 501,278
	-0.04	0.81	64,500	0	- 64,841	- 130,021	- 195,540	- 261,398	- 327,594	- 394,126	- 460,995
	-0.03	0.82	135,766	68,073	0	- 68,453	- 137,284	- 206,493	- 276,079	- 346,041	- 416,379
	-0.02	0.83	214,917	143,705	72,066	0	- 72,491	- 145,407	- 218,746	- 292,507	- 366,690
	-0.01	0.84	303,330	228,222	152,630	76,556	0	- 77,036	- 154,551	- 232,544	- 311,013
	0	0.85	-	-	-	-	-	-	-	-	-
	0.01	0.86	-	-	-	-	-	-	-	-	-
	0.02	0.87	-	-	-	-	-	-	-	-	-
	0.03	0.88	-	-	-	-	-	-	-	-	-

The following conclusions are drawn from this figure:

- there is no impact to non-AFD Access Holders where the system utilisation rate meets or exceeds the forecast utilisation rate;

- the positive impact arises largely from the under railing of the AFD Access Holder against the forecasts such that the benefit of the discount is less than the reduction in the system allowable revenue associated with the exclusion of allowable revenue for the AFD assets; and
- the negative impact arises predominantly from the reduction in Access Charges collected from the AFD Access Holder over railing against its forecast. However, this is misleading as under the current approach of rebating access charges paid, the over-railing AFD Access Holder would have been overpaid rebates and these overpayments would have been recovered from all System Users. Consequently, the negative impacts on take or pay amounts are largely proportional to cost transfers from overpaying rebates.

In respect of the last point, when the impact of both the change in the take or pay amounts to non-AFD Access Holders and the impact of removing under or over payments in rebates are considered the following results are obtained in Figure 8.

Figure 8 Combined Effect of Removing Rebates and Take or Pay to Non-AFD Access Holders

			AFD Access Holder Utilisation Rate								
	Dev. from F.cast		**-0.05**	**-0.04**	**-0.03**	**-0.02**	**-0.01**	**0**	**0.01**	**0.02**	**0.03**
			0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88
System Utilisation Rate	**-0.05**	0.80	-429,800.52	-405,430.86	-381,367.91	-357,611.07	-334,159.72	-311,013.27	-288,171.12	-265,632.65	-243,397.28
	-0.04	0.81	-365,300.50	-343,840.42	-322,720.86	-301,941.11	-281,500.47	-261,398.23	-241,633.68	-222,206.12	-203,114.85
	-0.03	0.82	-294,034.08	-275,767.06	-257,880.31	-240,372.98	-223,244.22	-206,493.20	-190,119.09	-174,121.06	-158,498.29
	-0.02	0.83	-214,883.13	-200,135.12	-185,814.48	-171,920.21	-158,451.30	-145,406.77	-132,785.61	-120,586.85	-108,809.49
	-0.01	0.84	-126,470.55	-115,618.42	-105,250.11	-95,364.41	-85,960.10	-77,036.00	-68,590.90	-60,623.61	-53,132.96
	0	0.85	-429,800.52	-343,840.42	-257,880.31	-171,920.21	-85,960.10	-	85,960.10	171,920.21	257,880.31
	0.01	0.86	-429,800.52	-343,840.42	-257,880.31	-171,920.21	-85,960.10	-	85,960.10	171,920.21	257,880.31
	0.02	0.87	-429,800.52	-343,840.42	-257,880.31	-171,920.21	-85,960.10	-	85,960.10	171,920.21	257,880.31
	0.03	0.88	-429,800.52	-343,840.42	-257,880.31	-171,920.21	-85,960.10	-	85,960.10	171,920.21	257,880.31

The data in Figure 8 needs to be interpreted as follows:

- the data in the cells where the system utilisation rate is above the forecast utilisation rate, the impacts reflect only the removal of the under or over payment of rebates. For example, when the AFD access holder rails 2% of contract above the forecast level, it is overpaid a rebate of $171k which is funded by all Access Holders in a system. The application of a discount to the Access Charge then represents a benefit to system users in this scenario. These impacts are symmetrical.
- the data in the cells where the system utilisation rate is less than forecast, the impacts represent the impact of both the removal of the rebate adjustments and the change in take or pay amounts to non-AFD Access Holders as presented in Figure 7.

Immateriality of Impacts

In the evaluated scenario above, the positive and negative impacts are not material relative to the overall System Allowable Revenue. As shown in Figure 9, when expressed as a percentage of the System Allowable Revenue, the impacts are not substantive and as discussed above, the assessment does not take into account the offsetting transfers to all System Users which occurs through the under or over payment of rebates which works in opposite directions to the variations in Take or Pay Amounts.

Figure 9 Variation in non-AFD Access Holder Take or Pay Amounts as Percentage of System Allowable Revenue

			AFD Access Holder Utilisation Rate								
	Dev. from F.cast		-0.05	-0.04	-0.03	-0.02	-0.01	0	0.01	0.02	0.03
		-	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88
System Utilisation Rate	-0.05	0.80	0.000%	-0.019%	-0.038%	-0.057%	-0.076%	-0.095%	-0.114%	-0.133%	-0.153%
	-0.04	0.81	0.020%	0.000%	-0.020%	-0.040%	-0.060%	-0.080%	-0.100%	-0.120%	-0.141%
	-0.03	0.82	0.041%	0.021%	0.000%	-0.021%	-0.042%	-0.063%	-0.084%	-0.106%	-0.127%
	-0.02	0.83	0.066%	0.044%	0.022%	0.000%	-0.022%	-0.044%	-0.067%	-0.089%	-0.112%
	-0.01	0.84	0.093%	0.070%	0.047%	0.023%	0.000%	-0.023%	-0.047%	-0.071%	-0.095%
	0	0.85	-	-	-	-	-	-	-	-	-
	0.01	0.86	-	-	-	-	-	-	-	-	-
	0.02	0.87	-	-	-	-	-	-	-	-	-
	0.03	0.88	-	-	-	-	-	-	-	-	-

Contributions to Non-AFD Access Holder Mine Specific Infrastructure

It is not unsurprising that the impact to non-AFD Access Holders is more negative as the overall system utilisation rate declines and the AFD Access Holder utilisation rate declines.

The practical effect of the discount to the Access Charge relative to the rebate on Access Charges paid is that the AFD Access Holder makes a lower contribution to system take or pay but consistent with Private Infrastructure Owners, incurs the costs of under-railing in respect of the benefits to its own funded infrastructure. That is, both the AFD Access Holder and Private Infrastructure Owner assume the mine specific volume risk on their own mine specific infrastructure where other Access Holders mine specific volume risk in respect of their mine specific infrastructure is socialised in the System Reference Tariff.

The observed negative impact is a redistribution to the amounts the AFD Access Holder contributes to the recovery of other Access Holder's mine specific infrastructure through the System Reference Tariff to its own.

In summary, the alternate approach of discounting the Access Charge payable is the most efficient means of achieving the following:

- giving effect to equivalence in the net cost of access between Private Infrastructure Owners and AFD Access Holders in the same circumstances; and
- removing the requirement for an AFD Access Holder to concurrently assume its own volume risk in respect of its own mine specific infrastructure and implicitly incurring the costs and risk of utilisation of other mine specific infrastructure in the common System Reference Tariff.

3.7 Implementation of Discounted Reference Tariffs for AFD Holders

The application of a discount to the access charge payable for AFD funded Rail Infrastructure should apply only to those assets which are mine specific infrastructure. Infrastructure which is subject to an AFD but utilised by more than one Access Holder is a common cost and should remain within System Reference Tariffs and continue to be subject to infrastructure rebates.

Aurizon Network obtained expressions of interest to apply a discount to the access charges payable in respect of the following mine specific infrastructure funded by an AFD:

- the relevant part of the Rolleston branchline ([redacted] of AFD funded Rail Transport Infrastructure);

- the South Walker Creek spur and balloon loop;
- the Hail Creek spur line and balloon loop;
- the Middlemount connecting infrastructure; and
- the Isaac Plains spur and balloon loop.

For the avoidance of doubt, this does not include Rail Infrastructure shown in Figure 10 which represents:

- the South Walker Creek and Hail Creek common corridor; or
- that part of the Rolleston branchline common to the Rolleston mine and the Meteor Downs South mine.

As the infrastructure rebate is calculated and determined on a $/nt basis, Aurizon Network has calculated the discounted Access Charge on the same basis. That is, an AFD discount will be applied as a reduction in the $/nt by the amount of the rebate payment. This is also a necessary outcome to ensure the discounted Access Charge does not alter the System Reference Tariff. Where the discount is applied to the AT3 $/ntk tariff component, this changes the relativity of the AT3 and AT4 System Reference Tariffs. This would then have redistribution effects between non-AFD Access Holders which is not consistent with the intent that the DAAU does not impact the System Reference Tariff.

Aurizon Network has also not applied an AFD discount to the Middlemount Connecting Infrastructure costs in this DAAU. The Middlemount Reference Tariff is currently inclusive of a Private Incremental Cost discount. The current value of this discount is less than the revenue attributable to the Private Infrastructure to ensure the Access Charge is not less than the Minimum Revenue Contribution. In this regard, the Minimum Revenue Contribution comprises the minimum contribution to common costs (AT2 + 50% of AT3) and the Allowable Revenue attributable to the AFD funded Connecting Infrastructure (the incremental costs specific to those services). That is, the circumstances in panel b) of Figure 3 apply.

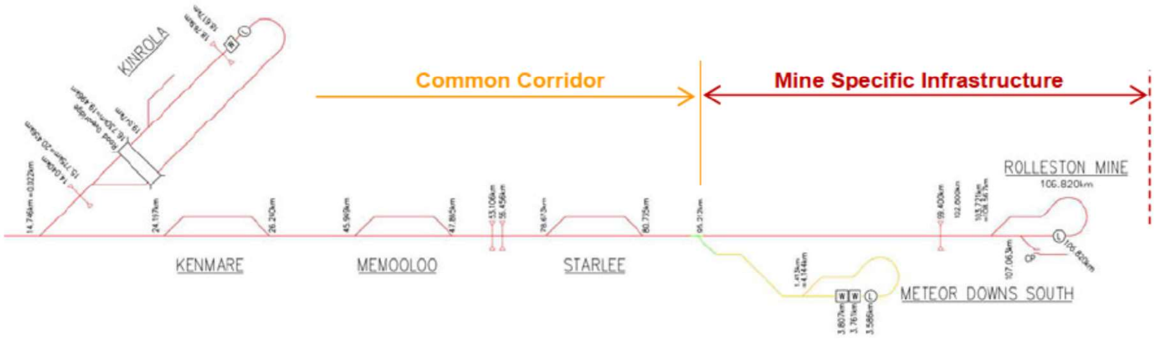
In order to apply the AFD discount, it would be necessary to apply the discount to both the AT3 and AT4 tariff components which would affect the System AT3 and AT4 rates as discussed above. In addition, the discounted Reference Tariff would then be equivalent to the minimum contribution to common costs. Aurizon Network also notes there are further complexities in simultaneously determining both the AFD discount and the PIC discount in terms of how the capped discount is distributed between the two asset classes.

Notwithstanding, as the Middlemount mine is both a Private Infrastructure Owner and an AFD Access Holder in respect of the Connecting Infrastructure for the private Middlemount spur and balloon loop, it is feasible to include the Connecting Infrastructure owned by Aurizon Network but funded by the Private Infrastructure Owner through the AFD within the approved PIC Amount.

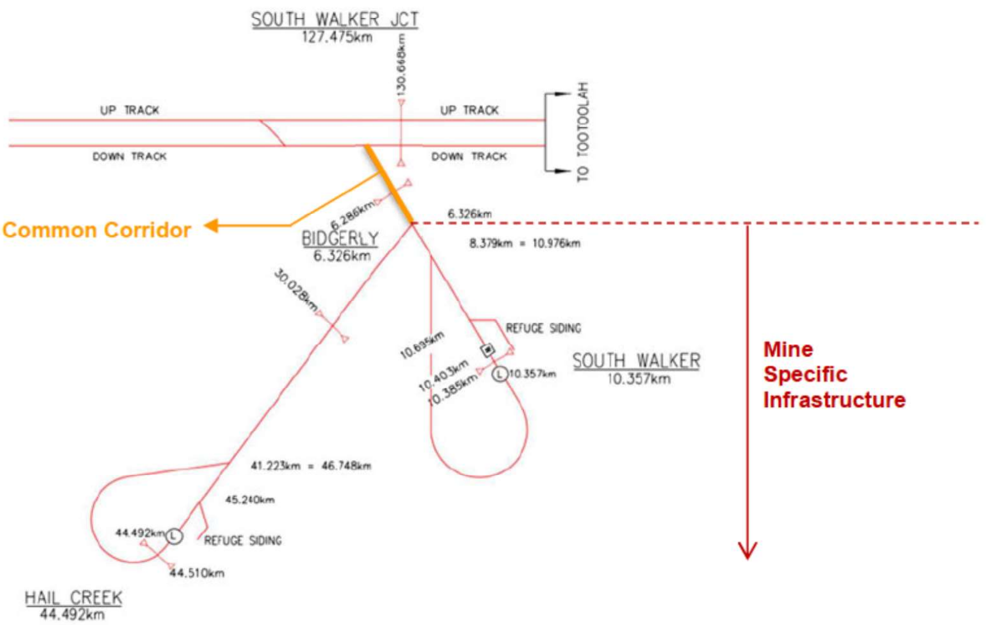
Therefore, where an AFD discount is applied to the Middlemount Connecting Infrastructure, it should occur through its removal of the Connecting Infrastructure from the RAB and included in the approved PIC Amount such that a *single discount* is calculated in respect of the increased value of the Private Infrastructure. Aurizon Network notes this does not require a DAAU and the customer may request the QCA review its approved PIC Amount concurrently with this DAAU.

Figure 10 Excluded Common Corridors Subject to AFD Arrangements

(a) Rolleston Common Corridor and Mine Specific Infrastructure



(b) South Walker Creek and Hail Creek Common Corridor and Mine Specific Infrastructure



The amendments necessary to implement discounts on the Access Charges for the nominated AFD Access Rights include:

- the reduction in the System Allowable Revenue equivalent to the allowable revenue attributable to the mine specific component of the AFD Rail Infrastructure; and
- adjusting the relevant Nominated Unloading Facility Reference Tariff Input to apply the forecast volume calculated discount to the System Reference Tariff.

As the reduction in the System Allowable Revenue is equivalent to the discounted Reference Tariff Inputs x the volume forecasts used to determine the System Reference Tariff, the DAAU has no impact on the System Reference Tariff.

The remainder of this section summarises the relevant system allowable revenue and reference tariff input adjustments associated with the application of discounted Access Charges to Nominated Loading Facilities.

Variations to FY26 and FY27 are associated with updating the Gtk Forecast to align to the approved FY25ARRT Gtk Forecast and updating the Allowable Revenue to reflect the approved FY25ARRT outcomes.

Variation to the Goonyella System Allowable Revenue and Reference Tariff Inputs

Table 3 Variation to Schedule F Clause 8.3 Gtk Forecast and Allowable Revenues

Year	Gtk Forecast (,000 gtk)	Allowable Revenue – $AT_{2\text{-}4}$ ($000)	Allowable Revenue – AT_5 ($000)
2022/23[1]	37,173,257	279,185	82,921
2023/24[1]	34,710,988	327,847	87,808
2024/25[1]	34,182,055	~~364,174~~ 351,476	~~92,756~~ 92,274
2025/26	~~34,710,988~~ 34,182,055	~~365,817~~ 355,326	~~79,631~~ 79,279
2026/27	~~34,710,988~~ 34,182,055	~~376,804~~ 366,948	~~81,856~~ 81,154

Table 4 Variation to Schedule F Clause 8.2(b) Reference Tariff inputs

Nominated Loading Facility	Reference Tariff input	2022/23^ ($)	2023/24^ ~ ($)	2024/25^ ($)	2025/26 ($)	2026/27 ($)
Middlemount	AT_3	3.45	4.52	4.86	~~4.94~~ 4.90	~~5.01~~ 4.96
	AT_4	0.93	1.21	1.30	~~1.32~~ 1.31	~~1.34~~ 1.33
	AT_5	1.17	1.24	1.55	~~0.97~~ 1.15	~~1.03~~ 1.20
Caval Ridge	AT_3	4.10	4.91	6.00	~~5.84~~ 6.05	~~6.01~~ 6.23
	AT_4	0.84	1.02	1.26	~~1.21~~ 1.27	~~1.25~~ 1.30
	AT_5	2.03	2.20	2.45	~~1.98~~ 2.06	~~2.05~~ 2.11
Olive Downs	AT_3		6.41	1.66	1.67	1.71
	AT_4		1.33	0.29	0.29	0.30
	AT_5		2.61	0.88	0.47	0.50
South Walker Creek	AT_4			1.50	1.51	1.55
	AT_5			2.73	2.34	2.39
Isaac Plains	AT_4			0.53	0.56	1.50
	AT_5			2.48	2.10	2.40
Hail Creek	AT_4			0.45	0.46	0.49

Variation to the Blackwater System Allowable Revenue and Reference Tariff Inputs

Table 5 Variation to Schedule F Clause 7.3 Gtk Forecast and Allowable Revenues

Year	Gtk Forecast (,000 gtk)	Allowable Revenue – $AT_{2\text{-}4}$ ($000)	Allowable Revenue – AT_5 ($000)
2022/23[1]	35,990,446	348,870	92,801
2023/24[1]	31,564,059	427,261	96,310
2024/25[1]	34,086,442	~~435,980~~ 432,298	109,940
2025/26	~~31,564,059~~ 34,086,442	~~440,007~~ 440,626	~~100,559~~ 101,459
2026/27	~~31,564,059~~ 34,086,442	~~458,684~~ 460,728	~~102,004~~ 103,577

Table 6 Variation to Schedule F Clause 7.2(c) Reference Tariff inputs

Nominated Loading Facility	Reference Tariff input	2022/23 ($)^	2023/24 ($)^~	2024/25 ($)^	2025/26 ($)	2026/27 ($)
Rolleston*	AT_3	6.94#	10.51	10.11	~~11.10~~ 10.28	~~11.50~~ 10.76
	AT_4	2.49#	3.40	3.03	3.11	3.28
Meteor Downs South	AT_3	4.77#	8.75	8.35	~~9.33~~ 8.53	~~9.83~~ 9.02
	AT_4	1.60#	2.68	2.57	~~2.87~~ 2.63	~~3.03~~ 2.79