



Mr George Passmore
Queensland Competition Authority
Level 27, 145 Ann Street
Brisbane QLD 4001

Aurizon Network – Annual review of Reference Tariffs – FY2022

26 February 2021

Dear George,

In accordance with Schedule F, Clause 4.1 of the 2017 Access Undertaking (**UT5**), Aurizon Network welcomes the opportunity to provide its proposed variations to Allowable Revenues and Reference Tariffs for the Financial Year commencing 1 July 2021 and ending 30 June 2022 (**FY2022**).

Aurizon Network has prepared proposed Reference Tariffs on an aggregate volume forecast for the Central Queensland Coal Network (**CQCN**) of 226.9 million tonnes. Given the ongoing uncertainty surrounding demand and production across the CQCN, the proposed FY2022 volume forecasts for each Coal System are based on historical operational performance for FY2020. Furthermore, the tonnage forecast for each Coal System are consistent with those that were assumed during the development of Aurizon Network's FY2022 Final Draft Maintenance and Renewals Strategy and Budget.

The Maintenance Indicator and Capital Indicator for FY2022 have been updated to reflect:

- › for the Blackwater, Goonyella and Moura Coal Systems, the Approved Maintenance and Renewal Strategy and Budget; and
- › for GAPE, the Approved Maintenance Strategy and Budget.

A Special Majority of End Users elected not to approve Aurizon Network's Maintenance and Renewal Strategy and Budget for the Newlands Coal System or the Renewals Strategy and Budget for GAPE. Due to this outcome, the Newlands Maintenance Strategy and Budget requires the approval of the Queensland Competition Authority (**QCA**) under clause 7A.11.3(p) and will be submitted to the QCA separately to this submission.

Aurizon Network has submitted its Final Draft Strategy and Budget for the respective Coal Systems as the proposed Maintenance Indicator and Capital Indicator (where relevant) in accordance with clause 7A.11.4 of UT5.

Aurizon Network has appended copies of the FY2022 Maintenance and Renewal Strategy and Budget and correspondence from the Chair of the Rail Industry Group (**RIG**) to this submission.

The accompanying submission details the methodology and factors considered in arriving at the proposed variations to Allowable Revenues and Reference Tariffs for FY2022, including:

- › consideration of a new coal carrying Train Service and the prospective impact of its Private Incremental Costs on Newlands System Reference Tariffs; and
- › further information relating to the treatment of Newlands System renewal expenditure.

Some of the information pertaining to the above matters is considered Confidential Information and should therefore be treated as such by the QCA for the purpose of s187 of the Queensland Competition Act 1997 (**Qld**).

In support of Aurizon Network's claim for confidentiality, the matter and rationale for the claim is outlined within the following Table 1.

Consequently, Aurizon Network has provided two versions of its FY2022 Annual Review of Reference Tariff submission:

- › a confidential (unredacted) version for the QCA; and
- › a redacted version in a form suitable for publication.

Aurizon Network has updated Schedule F to include the proposed amendments and has provided clean and marked-up versions of the amended UT5.

Detailed financial models supporting the proposed amendments will be provided directly to the QCA. Aurizon Network claims confidentiality over the financial models as they contain customer specific information.

Should you have any queries in relation to this submission, please do not hesitate to contact Michael Bray on michael.bray@aurizon.com.au.

Yours sincerely,



Jon Windle
Manager Regulation Network
Aurizon Network Pty Ltd

Aurizon Network

2017 Access Undertaking

Annual Review of Reference Tariffs – FY2022

26 February 2021



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Executive Summary

This submission is provided to the Queensland Competition Authority (**QCA**) in accordance with Schedule F, clause 4 of the 2017 Access Undertaking (**2017AU**). It sets out the methodology, data and assumptions that have been used to review FY2022 Allowable Revenues and Reference Tariffs for each Coal System. Table 1 summarises each of the adjustments proposed by Aurizon Network in this submission.

Table 1 Proposed adjustments impacting FY2022 Reference Tariffs

Schedule F Reference	Adjustment	Included in this submission?	Description
4.1(a)(i)	Revenue Adjustment Amount (Revenue Cap) for FY2020	✓	The inclusion of this variation is provided for under Schedule F.4.1(a)(i). The approved Revenue Cap is included for the FY2022 Reference Tariff calculations.
4.1(a)(ii)	Capital Expenditure Allowable Revenue Adjustments	✓	This adjustment is determined in accordance with Schedule E, clause 5(b). It adjusts Allowable Revenue to reconcile the difference between approved Capex claims for FY2019 and the respective Capital Indicator. The QCA approved the FY2020 capital expenditure claim on 19 February 2021. Aurizon Network has included an indicative value of the FY2020 capital expenditure allowable revenue adjustment, which is subject to QCA approval of the FY2020 RAB Roll-forward.
4.1(b)(i)	Revised volume forecasts for FY2022	✓	Aurizon Network proposes a revised volume forecast for the CQCN of 226.9 million tonnes (mt). The revised volume forecasts for each Coal System are outlined in Section 2.
4.1(b)(v)	Proposed Maintenance Indicator	✓	Aurizon Network has updated the Maintenance Indicator for each Coal System to reflect either the RIG-approved Maintenance Strategy and Budget or Aurizon Network's proposed Maintenance Indicator where approval has not been received. Further detail is contained within Section 3.
4.1(b)(vi)	Proposed Capital Indicator	✓	Aurizon Network has updated the Capital Indicator for each Coal System to reflect either the RIG-approved Renewals Strategy and Budget or Aurizon Network's proposed Capital Indicator where approval has not been received. Further detail is contained within Section 3.
4.1(b)(vii)(F)	Tax Allowance	✓	The tax allowance is a computation of the post-tax revenue model and is updated to reflect the changes proposed within this submission.
4.1(b)(viii)	Forecast IE Pass Through Cost	✓	The Independent Expert (IE) advised Aurizon Network of the forecast IE Pass Through Cost on 2 Feb 2021. Further detail, including the treatment of the FY2021 underspend, is provided within Section 4.
4.1(c)(ii)	Electric Transmission and Connection Charges	✓	Reduction in electric infrastructure charges to reflect the latest forecast of transmission and connection charges.
2.2(a)	Electric Energy (EC) Charge	✓	Reduction in Electric Energy Charges (EC) to reflect the latest cost forecasts.
	QCA Levy	✓	Reduction in the QCA Levy to reflect the latest cost forecasts (based the QCA's forecast regulatory fees for FY2021 dated as 24 June 2020) and revised volume forecasts for FY2022.

Aurizon Network has applied the adjustments outlined in Table 1 to adjust Reference Tariffs and Allowable Revenues for each Coal System.

The current QCA-approved Maintenance Indicator and Capital Indicator for FY2022 (as reflected in Allowable Revenues and Reference Tariffs for that year) were based on the ‘four-year forecasts’ included within the Approved Maintenance and Renewals Strategy and Budget for FY2021. It was always expected that these indicators would be updated for the forthcoming financial year as part of the FY2022 Maintenance Strategy and Budget and Renewals Strategy and Budget process.

In addition to the aforementioned adjustments, this submission also takes into consideration the following matters, which are relevant to setting Reference Tariffs in FY2022:

- > Application of Private Incremental Costs for a new coal carrying Train Service; and
- > Additional information relating to Aurizon Network’s proposed approach to allocating shared rail corridor renewals expenditure in the Newlands System.

Please refer to Section 4 of this submission for more information in relation to these matters.

The proposed System Forecasts, Allowable Revenues and Reference Tariffs for FY2022 are summarised below. Please note that minor variances may exist due to rounding.

System Forecasts

The proposed System Forecasts for the Central Queensland Coal Network (**CQCN**) for FY2022 are summarised in the Table 2 below as both million Net Tonnes (**nt**) and Gross Tonne Kilometres (**GTK's**).

Table 2 Proposed System Forecasts – FY2022

System	Net Tonnes	GTK'000
Blackwater	62.6	35,724,809
Goonyella	117.7	37,733,317
Moura	13.6	3,538,134
Newlands	14.1	3,111,415
GAPE	18.8	9,467,598
Total	226.9	89,575,272

The methodology used to arrive at the proposed System Forecasts is provided in Section 2 of this submission.

Allowable Revenue

The proposed AT2-4 and AT5 Allowable Revenue for the CQCN are summarised in Table 3 below.

Table 3 Proposed Allowable Revenues – FY2022 (\$m)

System	AT2-4	AT5*
Blackwater	352.2	75.0
Goonyella	277.2	71.5
Moura	51.9	--
Newlands	34.1	--
GAPE	124.9	--
Total (\$m)	840.3	146.6

* At the time of submission, Aurizon Network had not received written notification of a change in pricing for FY2022 transmission and connection charges from the relevant Distribution Entities and/or Transmission Entities. Aurizon Network has, however, reduced the forecast of FY2022 transmission and connection charges to reflect the proposed changes to the FY2022 volume forecasts as outlined in this submission. Aurizon Network may seek a further variation to these charges where such a notification is received following this submission and constitutes an Endorsed Variation Event.

A discussion of the respective Allowable Revenue adjustments applicable to each system is provided in Section 3 of this submission.

Reference Tariffs

The proposed Reference Tariffs for the CQCN are summarised in Table 4 below.

Table 4 Proposed Reference Tariffs – FY2022

System	AT1	AT2	AT3	AT4	AT5	EC	QCA Levy	IE Pass Through Cost
Blackwater	0.99	2,429.76	7.18	2.56	2.98	0.83	0.0033	0.01485
Goonyella	0.68	1,539.39	5.09	1.03	1.97	0.83	0.0033	0.01485
Moura	1.84	719.63	11.11	1.80	--	--	0.0033	0.01485
Newlands	1.91	325.41	8.78	1.11	--	--	0.0033	0.01485
GAPE	1.54	15,106.30	1.24	1.91	--	--	0.0033	0.01485

It should be noted that the proposed QCA Levy has been updated to reflect both the QCA's estimate of regulatory fees for FY2021 and the revised FY2022 volume forecasts outlined in this submission. Aurizon Network may seek a further variation to the QCA Levy for FY2022 following the QCA's announcement of its fees for the provision of regulatory services for the rail industry.

Considerations relevant to the allocation of asset replacement and renewal expenditure in the shared Newlands System rail corridor

As noted in Aurizon Network's FY2022 Maintenance and Renewals Strategy and Budget and in stakeholder submissions on Aurizon Network's FY2020 Capital Expenditure claim, some Customers have requested further information in relation to Aurizon Network's approach to allocating renewal expenditure in the shared Newlands rail corridor between Newlands and GAPE Train Services.

The current approved approach:

- > allocates assets that are identified within the GAPE System component of the RAB (i.e. the GAPE Link or those other infrastructure enhancements constructed as part of the GAPE project) to GAPE Allowable Revenues and Reference Tariffs; and
- > allocates assets that are identified within the Newlands System component of the RAB to the Newlands System.

Aurizon Network maintains that this approach results in efficient prices which are consistent with the pricing principles outlined in Part 6 of the 2017AU and better satisfy the economic efficiency and fairness objectives, which ultimately underpin the QCA's Statement of Regulatory Pricing Principles.

Aurizon Network has provided further evidence in Section 4 below to demonstrate how its approach is consistent with the requirements of the 2017AU.

1. Introduction

1.1 Background

The 2017AU provides:

- > Allowable Revenues;
- > System Forecasts; and
- > Reference Tariffs,

for each Coal System and for each year until financial year (FY) 2023. The current values for financial year FY2022 are outlined in Schedule F of the 2017AU, and were most recently approved by the QCA as part of its Final Decision on the Meteor Downs South Pricing Draft Amending Access Undertaking, dated 17 December 2020.

Reference Tariffs are an essential element of the 2017AU as they are used to determine the Access Charges payable to Aurizon Network for the provision of the declared service. They are derived directly from the Allowable Revenues and volume forecasts that are applicable to each Coal System. However, both the Allowable Revenues and volume forecasts themselves are based on assumptions made at a point in time.

To ensure that the Reference Tariffs applicable to each Coal System for each year remain efficient and cost-reflective, the 2017AU provides a process through which Aurizon Network can seek QCA approval to update a defined number of assumptions to reflect the latest available information.

This process is the annual review of Reference Tariffs. Unless otherwise stated, capitalised terms in this submission have the meaning defined in the 2017AU.

1.2 Form of Submission

The submission outlines all matters that are relevant to the annual review of Reference Tariffs for FY2022.

- > Section 2 sets out the revised System Forecasts for each Coal System and contains the methodology and assumptions used to determine them;
- > Section 3 discusses the matters that have a direct impact to FY2022 Allowable Revenues, including:
 - Capital Expenditure Allowable Revenue Adjustment;
 - Revised Direct Maintenance Indicator; and
 - Revised Capital Indicator;
- > Section 4 discusses other relevant matters for consideration, including:
 - A new coal carrying Train Service and the prospective impact of its Private Incremental Costs on Newlands System Reference Tariffs; and
 - Treatment of Newlands System renewal expenditure;
- > Section 5 shows the combined impact of the proposed adjustments on FY2022 Allowable Revenues and Reference Tariffs.

Aurizon Network has also provided the following information as appendices to this submission:

- > Appendix A: Amended 2017 Access Undertaking (clean)
- > Appendix B: Amended 2017 Access Undertaking (mark-up)

> Appendix C: FY22 Maintenance and Renewal Strategy and Budget

Aurizon Network notes that this submission contains Confidential Information. A separate redacted version will be provided to the QCA in a form that is suitable for publication.

In addition, Aurizon Network has prepared detailed financial models (**the Models**) in support of this submission and has provided the Models to QCA staff in electronic form. The Models contain Confidential Information relating to individual Train Services and accordingly Aurizon Network requests that the Models are not published.

2. System Forecasts

The 2017AU, clause 4.1(b) provides a process through which Aurizon Network can submit revised System Forecasts to the QCA for approval prior to the beginning of each financial year.

Aurizon Network notes the current uncertainty in global markets and the potential impact of the outstanding Initial Capacity Assessment Report (**ICAR**). For FY2022, Aurizon Network proposes to reduce CQCN volume forecasts from 251.3 million nt to 226.9 million nt. The proposed volume forecast is aligned to the volume forecasts that were assumed during the development of the FY2022 Final Draft Maintenance and Renewals Strategy and Budget.

Given the uncertainty, Users are likely to benefit from an update of volume forecasts closer to the commencement of FY2022. Aurizon Network recommends a short QCA process to review and update the forecast volumes contained within this submission for any known changes prior to the end of FY2021.

The proposed changes for each Coal System are outlined in Table 5.

Table 5 Proposed FY2022 Regulatory Volume Forecasts

FY2022 Volume Forecast (million nt)	Current Approved Forecast	Proposed Forecast	Variance
Blackwater	70.2	62.6	(7.6)
Goonyella	131.7	117.7	(14.0)
Moura	17.3	13.6	(3.7)
Newlands	13.2	14.1	0.9
GAPE	18.9	18.8	(0.0)
Total	251.3	226.9	(24.4)

The proposed FY2022 volume forecasts for the Newlands System consider volumes associated with a new coal carrying train service. Volume forecasts for individual Train Services are considered to be Confidential Information due to their customer-specific nature and accordingly, have been consolidated into the above System Forecasts. The forecasts for individual Train Services are, however, separately identifiable in the Models provided to the QCA.

2.1 Regulatory System Forecasts – approved vs actual

The current approved system volume forecast for FY2022 of 251.3 million nt was based on the 2017AU Final Decision in December 2019. It was set by simply extrapolating the QCA approved volume forecast for FY2021 (which at the time was 249.2 mt) by the compounding annual growth rate (CAGR) for each Coal System; calculated between FY2019 - FY2021. While this approach is arbitrary in nature, it was adopted at that point in time for the purpose of estimating Reference Tariffs up until the Reset Date, i.e. for FY2022 and FY2023. No other forecast was available that could be relied upon, and it was generally understood that these forecasts would be updated as part of this annual review of Reference Tariffs process.

Table 6 below compares the QCA approved regulatory forecast for the CQCN to actual billed tonnes for FY2018 to FY2020.

Table 6 CQC Regulatory Volume Forecasts – 2017AU Final Decision (million tonnes)

System	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Blackwater	64.6	67.2	68.2	69.2	70.2	71.2
Goonyella	127.6	131.0	131.5	131.5	131.7	132.0
Moura	11.5	15.0	16.5	16.5	17.3	18.2
Newlands	11.7	13.2	13.2	13.2	13.2	13.2
GAPE	15.9	18.9	18.9	18.9	18.9	18.9
2017AU Final Decision	231.2	245.2	248.2	249.2	251.3	253.4
QCA-approved revised forecast	231.2	233.8~	240.0*	239.2**	226.9 [^]	
Actual Tonnes	229.6	232.7	226.9			
- Variance to 2017AU Final Decision	(1.6)	(12.5)	(21.3)			
- Variance to revised forecast	(1.6)	(1.1)	(13.1)			

~ As per Aurizon Network's Reference Tariff Variation DAAU, approved by the QCA on 24 June 2019.

* As per Aurizon Network's Consolidation DAAU, approved by the QCA on 21 February 2020.

** As per FY2021 Annual Review of Reference Tariffs, approved by the QCA on 28 May 2020.

[^] Revised forecast proposed in this FY2022 Review of Reference Tariffs submission.

Table 6 above illustrates the material (21.3 million nt) shortfall in volumes compared to the regulatory forecast in FY2020. Based on 1H FY2021 volumes of 103.7mt, it is likely that volumes in FY2021 will again be materially lower than the 2017AU Final Decision forecasts, and the forecast approved as part of the FY2021 Annual Review of Reference Tariffs. These outcomes are reflective of the current volatility in demand and create some uncertainty in forecasting.

2.2 Proposed forecasting methodology

Given the ongoing uncertainty surrounding demand and production across the CQC, and the outstanding ICAR, Aurizon Network believes that FY2020 actual volumes represent the most appropriate baseline from which to set revised volume forecasts for FY2022.

The proposed volume forecasts are provided in Table 7 below and are aligned to those that were assumed during the development of the FY2022 Final Draft Maintenance and Renewals Strategy and Budget. As noted above, Aurizon Network recommends that volume forecasts be reviewed closer to the commencement of FY2022.

Table 7 FY2022 Proposed Volume Forecast (million nt)

System	FY2020 Actuals	FY2022 Proposed Forecast
Blackwater	62.6	62.6
Goonyella	117.7	117.7
Moura	13.6	13.6
Newlands	14.1	14.1
GAPE	18.8	18.8
Total	226.9	226.9

In determining the volume forecasts for individual Train Services (i.e. for each origin – destination pair), the FY2022 volume forecasts have been allocated in proportion to each Train Service’s share of FY2022 “adjusted contract” in each respective Coal System.

In determining “adjusted contract”, Aurizon Network has reviewed each existing Train Service. Any contracted Train Service that had not railed in FY2020 or FY2021, has been excluded from the adjusted contract calculation. For clarity, anticipated new hauls and contract renewals currently under negotiation have been included in the adjusted contract calculation.

Aurizon Network’s revised Gtk Forecast for each Coal System is summarised in the table below.

Table 8 Proposed Volume Forecasts – FY2022

System	Net Tonnes	GTK’000
Blackwater	62.6	35,724,809
Goonyella	117.7	37,733,317
Moura	13.6	3,538,134
Newlands	14.1	3,111,415
GAPE	18.8	9,467,598
Total	226.9	89,575,272

The revised net tonne forecasts for each Coal System have been converted to GTK and electric GTK based on:

- > The assumed Reference Train Payload for each Coal System; and
- > For the Blackwater and Goonyella systems, the forecast split between diesel and electric consists, which remains aligned to the values approved by the QCA in their final decision on the 2017AU.

The GTK forecast for the Blackwater System has been profiled to derive the monthly GTK forecasts that are required for Schedule F, clause 12.

3. Proposed Allowable Revenue Adjustments

In addition to the revised System Forecasts outlined in Section 2, Aurizon Network submits the following adjustments to FY2022 Allowable Revenues to the QCA for approval:

- > Capital Expenditure Allowable Revenue Adjustments for the approved FY19 RAB Roll Forward;
- > Indicative Capital Expenditure Allowable Revenue Adjustments for FY20 to reflect the QCA's Final Decision to approve Aurizon Network's FY20 capital expenditure claim on 19 February 2021;
- > Revised Direct Maintenance Indicator; and
- > Revised Capital Indicator.

The impact of each of these adjustments will vary between Coal systems and are outlined below.

At the time of this submission, the Independent Expert has not published its ICAR. The ICAR will, amongst other things, assess Deliverable Network Capacity and whether an Existing Capacity Deficit exists in a Coal System. The resulting consultation between Aurizon Network, End Users, Customers, Access Holders and Train Operators may determine that the most effective and efficient way of addressing the Existing Capacity Deficit is for Aurizon Network to make changes to the Rail Infrastructure or the operation and maintenance practices for the Rail Infrastructure in a relevant Coal System.

Consequently, it should be noted that System Forecasts, maintenance and renewal practices, scope, budgets (including the Maintenance and Capital Indicators for each Coal System) and access requirements may be subject to change as a result of the ICAR and any agreed Transitional Arrangements.

3.1 Capital Expenditure Allowable Revenue Adjustment

The inclusion of this adjustment is permitted under Schedule F, 4.1(a)(ii) and calculated in accordance with Schedule E, clause 5(b). This adjustment reconciles the difference in Allowable Revenue between:

- > Approved Capital Expenditure; and the
- > Capital Indicator for the Year in which that relevant capital expenditure was incurred.

The adjustment to Allowable Revenues is comprised of the following components:

- > Return on capital
- > Return of capital (depreciation offset by inflation); and
- > Tax depreciation.

FY2019 Capital Expenditure Allowable Revenue Adjustment

Aurizon Network's FY2019 Capital Expenditure claim of \$126.8¹ million including interest during construction was approved by the QCA on 28 May 2020. The difference between the Approved Capital Expenditure and the Capital Indicator for FY2019 for each Coal System are outlined in the following table. These values are expressed in 'start of year' terms.

¹ QCA approved \$126.8 million in 'mid-year' terms which is equivalent to \$123.3 million in 'start of year' terms.

Table 9 Approved Capital Expenditure – FY2019 (\$m)

System	Capital Indicator	Approved Capital Expenditure	Variance
Blackwater	83.1	54.6	(28.6)
Goonyella	81.5	43.1	(38.4)
Moura	14.6	15.6	1.0
Newlands	10.5	9.9	(0.6)
GAPE	0.0	0.1	0.1
Total (\$m)	189.7	123.3	(66.4)

It should be noted that the FY2019 Capital Indicator represented an indicative forecast set at a point in time in advance of that year. Actual expenditure in FY2019 fell below the Capital Indicator and the 'Approved Capital Expenditure' provided in Table 9 reflects full approval by the QCA of Aurizon Network's FY2019 capital expenditure claim.

Aurizon Network has updated its financial models to reflect the Approved Capital Expenditure for FY2019 and the associated RAB roll-forward (which was approved by the QCA on 3 July 2020) and determined the relevant difference in Allowable Revenues in accordance with Schedule E, clause 5(b).

The resulting Allowable Revenue differences for each year are then accrued at the Discount Rate (i.e. the approved WACC) for inclusion in FY2022 Allowable Revenues.

The FY2019 Capital Expenditure Allowable Revenue Adjustments applicable to FY2022 are outlined below:

Table 10 FY2019 Capital Expenditure Allowable Revenue Adjustment to FY2022 Allowable Revenues (\$m)

System	AT2-4	AT5
Blackwater	(13.5)	(1.4)
Goonyella	(7.2)	(2.0)
Moura	0.4	--
Newlands	(0.2)	--
GAPE	0.0	--
Total (\$m)	(20.4)	(3.4)

FY2020 Capital Expenditure Allowable Revenue Adjustment

Aurizon Network's FY2020 Capital Expenditure claim of \$238.2² million including interest during construction was approved by the QCA on 19 February 2021. The difference between the Approved Capital Expenditure and the Capital Indicator for FY2020 for each Coal System are outlined in the following table. These values are expressed in 'start of year' terms.

² QCA approved \$238.2 million in 'mid-year' terms which is equivalent to \$231.5 million in 'start of year' terms.

Table 11 Approved Capital Expenditure – FY2020 (\$m)

System	Capital Indicator	Approved Capital Expenditure	Variance
Blackwater	106.4	93.9	(12.5)
Goonyella	101.1	100.6	(0.5)
Moura	14.7	13.2	(1.5)
Newlands	8.4	20.1	11.7
GAPE	1.7	3.6	2.0
Total (\$m)	232.2	231.5	(0.7)

Aurizon Network has updated its financial models to reflect the approved Capital Expenditure for FY2020 and has calculated an indicative FY2020 Capital Expenditure Allowable Revenue Adjustment on the basis of a preliminary RAB roll-forward.

The resulting Allowable Revenue differences for each year are then accrued at the Discount Rate (i.e. the approved WACC) for inclusion in FY2022 Allowable Revenues.

The indicative FY2020 Capital Expenditure Allowable Revenue Adjustments applicable to FY2022 are outlined below:

Table 12 Indicative FY2020 Capital Expenditure Allowable Revenue Adjustment (\$m)

System	AT2-4	AT5
Blackwater	(11.4)	0.3
Goonyella	4.8	0.2
Moura	0.4	--
Newlands	2.3	--
GAPE	4.5	--
Total (\$m)	0.7	0.5

It should be noted that the QCA approved Aurizon Network's FY2020 Capital Expenditure Claim on 19 February 2021. Aurizon Network has not yet submitted the FY2020 RAB Roll-forward for QCA approval but notes that the QCA's final decision pertaining to that RAB Roll-forward will ultimately be considered when setting Allowable Revenues and Reference Tariffs for FY2022. The indicative adjustments to Allowable Revenues outlined in Table 12 will be revised to reflect the QCA's final decision on the FY2020 RAB Roll-forward.

3.2 Maintenance Indicator

The inclusion of this adjustment is permitted under Schedule F, 4.1(b)(v). On 14 February 2021, the Chair of Rail Industry Group notified Aurizon Network of the following voting outcomes:

Table 13 Final draft Maintenance Strategy and Budget - voting outcomes

System	Vote Outcome - Special Majority of End Users for that coal system:
Blackwater	Approved the final draft Maintenance Strategy and Budget
Goonyella	Approved the final draft Maintenance Strategy and Budget
Moura	Approved the final draft Maintenance Strategy and Budget
Newlands	Elected not to approve the final draft Maintenance Strategy and Budget
GAPE	Approved the final draft Maintenance Strategy and Budget

Aurizon Network submits the proposed Maintenance Indicator to the QCA in accordance with clause 7A.11.4(a) of the 2017AU. Aurizon Network notes that the proposed Maintenance Indicator for Blackwater, Goonyella, Moura and GAPE is consistent with the Approved Maintenance Strategy and Budget and accordingly should be approved by the QCA.

Aurizon Network confirms that for the purpose of this submission, the Maintenance Indicator for the Newlands System reflects Aurizon Network's final draft Maintenance Strategy and Budget, and notes that this matter will be considered separately by the QCA under clause 7A.11.3(p). Aurizon Network will make a separate submission to the QCA on this matter, however, would welcome an efficient QCA process that would see any outcomes from that QCA review factored into the outcomes of this Annual review of Reference Tariffs.

A comparison between the QCA-approved Maintenance Indicator and the proposed Maintenance Indicator for FY2022 for each Coal System is as follows:

Table 14 FY2022 Maintenance Indicator – Direct (\$m)

System	Current Maintenance Indicator – FY2022 ³	Proposed Maintenance Indicator – FY2022	Variance
Blackwater	63.0	65.0	2.0
Goonyella	60.7	61.1	0.4
Moura	12.0	12.4	0.4
Newlands	3.1	3.8	0.7
GAPE	11.0	8.8	(2.2)
Total (\$m)	149.8	151.1	1.3

Aurizon Network has updated Allowable Revenues and Reference Tariffs to reflect the proposed Maintenance Indicator for FY2022 and FY2023. Please note that the proposed Maintenance Indicators for FY2023 will be refined through future RIG engagements prior to the commencement of FY2023. The engagements will be conducted in accordance with clause 7A.11.3 of the 2017AU.

³ The current QCA-approved FY2022 Maintenance Indicator for each Coal System is consistent with the updated forecast provided as part of the Approved Maintenance Strategy and Budget for FY2021.

It should be noted that in accordance with the 2017AU, clause 7A.11.5, Aurizon Network is required to submit (by 30 September) a Maintenance Cost Claim for actual costs to the QCA for approval. To the extent that Aurizon Network's Maintenance Cost Claim for FY2022 varies from the Approved Maintenance Strategy and Budget, members of the RIG will have an opportunity to make submissions to the QCA. If the QCA approves a Maintenance Cost Claim that is lower (or higher) than the approved Maintenance Indicator, these amounts will be reconciled as part of the Revenue Adjustment Amounts (Revenue Cap) submission in accordance with Schedule F, clause 4.3.

Aurizon Network notes that for the purpose of assessing a Maintenance Cost Claim, the QCA will consider whether material variations in the actual cost of delivering an "item" that is contained within the Maintenance and Renewal Strategy and Budget, are prudent and efficient. Furthermore, the term "item" is undefined in the 2017AU. As outlined in Aurizon Network's response to the Rail Industry Group's proposed amendments to the FY22 Draft Maintenance and Renewal Strategy and Budget, for Moura and Newlands/GAPE, the maintenance budgets for each system in their entirety will be considered an 'item' for the purposes of Clause 7A.11.5(f)(ii)(B)(2).

3.3 Capital Indicator

The inclusion of this adjustment is permitted under Schedule F, 4.1(b)(vi). On 14 February 2021, the Chair of the Rail Industry Group notified Aurizon Network of the following voting outcomes:

Table 15 Final draft Renewals Strategy and Budget - Voting outcomes

System	Vote Outcome - Special Majority of End Users for that coal system:
Blackwater	Approved the final draft Renewals Strategy and Budget
Goonyella	Approved the final draft Renewals Strategy and Budget
Moura	Approved the final draft Renewals Strategy and Budget
Newlands	Elected not to approve the final draft Renewals Strategy and Budget
GAPE	Elected not to approve the final draft Renewals Strategy and Budget

Aurizon Network submits the proposed Capital Indicator to the QCA in accordance with clause 7A.11.4(c) of the 2017AU. Aurizon Network notes that the proposed Capital Indicator is consistent with the Approved Renewals Strategy and Budget for Blackwater, Goonyella and Moura and accordingly should be approved by the QCA.

Aurizon Network notes that, in accordance with Clause 7A.11.3(m)(iii) of the 2017AU, the Capital Indicator for Newlands and GAPE reflects Aurizon Network's final draft Maintenance Strategy and Budget. Aurizon Network has provided further information in Section 4 as to why it considers that the treatment of renewals expenditure on Newlands System shared rail corridor results in economically efficient outcomes for Newlands and GAPE Train Services.

A comparison between the current Capital Indicator⁴ and the proposed Capital Indicator for FY2022 by each Coal system is outlined in the following table. Please note that these values are expressed in 'Mid-Year' terms.

⁴ Updated as part of the QCA's approval of the FY2021 Annual review of Reference Tariffs on 28 May 2020.

Table 16 FY2022 Capital Indicator (\$m, mid-year)

System	Current Capital Indicator – FY2022 ⁵	Proposed Capital Indicator – FY2022	Variance
Blackwater	110.5	117.1	6.6
Goonyella	118.0	120.9	2.9
Moura	9.8	11.8	2.0
Newlands	23.5	25.0	1.6
GAPE	--	0.3	0.3
Total (\$m)	261.8	275.1	13.3

Aurizon Network has updated Allowable Revenues and Reference Tariffs to reflect the proposed Capital Indicator for FY2022 and FY2023. Please note that the proposed Capital Indicator for FY2023 will be refined through future RIG engagements prior to the commencement of FY2023. The engagements will be conducted in accordance with clause 7A.11.3 of the 2017AU.

Aurizon Network has provided additional information in relation to the pricing treatment of renewal expenditure in the shared Newlands System rail corridor in Section 4 of this submission.

⁵ The current QCA-approved FY2022 Capital Indicator for each Coal System is consistent with the updated forecast provided as part of the Approved Renewals Strategy and Budget for FY2021.

4. Other relevant matters

In addition to the proposed adjustments outlined in Section 3 above, there are several other matters that may impact the proposed Allowable Revenues for FY2022. These are discussed below.

4.1 Revenue Adjustment Amount (Revenue Cap) for FY2020

The inclusion of this variation is permitted under Schedule F, 4.1(a)(i). The FY2020 Revenue Cap was approved on 17 December 2020. The details of the adjustments are outlined in the table below:

Table 17 FY2022 Allowable Revenue Adjustments relating to the FY2020 Revenue Cap (\$m)

System	Revenue adjustment amount
Blackwater	4.3
Goonyella	0.0
Moura	2.4
Newlands	(1.8)
GAPE	(1.5)
Total Adjustments (\$m)	3.4

4.2 Forecast IE Pass Through Cost

The inclusion of this variation is permitted under Schedule F, 4.1(b)(viii). On 2 February 2021, the Independent Expert (IE) notified Aurizon Network of its forecast IE Pass Through Cost for FY2022, including relevant adjustments to account for a forecast under-spend, and invoicing under-recovery during FY2021.

Aurizon Network has provided this information in Table 18 below, including the derivation of the FY2022 IE Pass Through Cost Reference Tariff.

Table 18 FY2022 IE Pass Through Cost

Description	Value
Estimate of expenditure to operate CNCCo in FY2022 (\$m)	4.2
Less: Expense under-spend for FY2021 (\$m)	(1.4)
Add: Invoicing under-recovery for FY2021 (\$m)	0.6
Estimated IE Pass Through Cost FY2022 (\$m)	3.4
Total estimate volume for FY2022 (million nt)	226.9
Estimated IE Pass Through Cost (\$/nt)	0.01485

4.3 Tax Allowance

The adjustment to the tax allowance is provided for under Schedule F, 4.1(b)(vii)(F).

The tax allowance is a computation of Aurizon Network's post-tax revenue model, which is used to calculate the proposed Allowable Revenues and Reference Tariffs for FY2022. The tax allowance will be updated to reflect, and ensure consistency with, all proposed changes within this submission that impact Allowable Revenues.

4.4 Adjustments to electric infrastructure charges

The electric transmission charges paid by Aurizon Network are determined in accordance with an established regulatory framework and oversight by the AER. Aurizon Network also has an incentive to negotiate more favourable transmission connection costs to deliver a lower AT5 tariff to promote utilisation of its electric assets.

At the time of this submission, the forecast of FY2022 connection and transmission charges has not been received from Transmission Network Service Providers (**TNSP**).

Aurizon Network has, however, updated the forecast costs for FY2022 to reflect both the reduction in FY2022 volume forecasts and the application of the final rates for FY2021 rates, as notified by TNSP on 13 March 2020. The table shows Aurizon Network's updated cost estimates for FY2022.

Table 19 FY2022 TNSP costs (\$m)

System	Current	Proposed	Variance
Blackwater	27.1	26.4	(0.7)
Goonyella	33.1	31.7	(1.4)
Total (\$m)	60.2	58.1	(2.1)

Once the notification of the updated FY2022 connection and transmission charges is received from the relevant TNSP, Aurizon Network will assess whether the change constitutes an Endorsed Variation Event in accordance with the 2017AU, Schedule F, clause 5.2(b).

4.5 Electric Energy Charge

The EC tariff is set to recover the forecast costs relating to the consumption of electric energy.

The 2017AU includes an EC tariff for FY2022, which was based on forecast financial inputs. These inputs have since been updated to reflect more recent information received from electricity retailers. The net impact of the estimated electric energy charges the approved in 2017AU is outlined in the table below.

Table 20 FY2022 Electric Energy Charges (\$m)

Electric Energy (\$m)	2017AU	Updated Forecast	Variance
FY2022	63.5	51.6	(11.9)

For the purpose of setting a revised EC tariff for FY2022, Aurizon Network has taken into consideration of the proposed FY2022 volume reset. The resulting EC tariff is as follows:

Table 21 FY2022 EC Tariff

EC Tariff (\$/'000 egtk)	Current	Proposed	Variance
FY2022	0.90	0.83	(0.07)

Schedule F, clause 2.2(e) requires Aurizon Network to separately identify the Environment Compliance Charge and Variable Connection Charge within the EC tariff.

The relevant amounts are as follows:

Table 22 Composition of proposed electric energy charge

Cost component	\$m	\$/'000 egtk
Consumption and Supply	35.4	0.57
Environment Compliance Charge	11.6	0.19
Variable Connection Charge	4.7	0.08
Total	51.6	0.83

4.6 Application of Private Incremental Costs to New Coal Carrying Train Services

The proposed FY2022 volume forecasts for the Newlands System consider volumes associated with a new coal carrying train service. In accordance with clause 6.3.1(c), it is necessary to calculate the proposed access charges for these new services.

In the absence of an Expansion, the access charge for a new coal carrying train service will be the higher of:

- > the relevant Reference Tariff (including any Reference Tariff determined in accordance with clause 6.4) applied to that Train Service, less the annual maximum allowable revenue (calculated in the same manner as for the relevant Reference Tariff) derived from the Approved Private Incremental Costs (**PIC**) (if any); and
- > the Minimum Revenue Contribution, calculated as the sum of the Incremental Costs of using any Rail Infrastructure specifically for the new coal carrying Train Service and the sum of:
 - the relevant AT2 component of the relevant Reference Tariff (adjusted for any variation that will be made in accordance with Schedule F for that Train Service for a Cross System Train Service); and
 - fifty percentage points (50%) of the AT3 component of the relevant Reference Tariff (adjusted for any variation that will be made in accordance with Schedule F for that Train Service for a Cross System Train Service) for the distance that the Train Service will travel on the mainline of that Coal System.

The new coal carrying train service is expected to incur material capital expenditure costs on private infrastructure. However, clause 6.3.2(e)(ii) of the 2017AU requires that the value of the Approved PIC is zero unless and until the QCA approves the relevant Private Incremental Costs.

As at the date of this submission, the QCA has not approved the relevant Private Incremental Costs for this new coal carrying train service. Aurizon Network expects that where such amounts are approved by the QCA, the materiality of the Approved PIC would result in the new coal carrying train service being subject to paying an access charge which comprises only the Minimum Revenue Contribution.

At this stage, Aurizon Network has calculated the proposed FY22 Reference Tariffs for the Newlands System on the basis that the Approved PIC amount is zero in accordance with the 2017AU. Nevertheless, for information purposes and to provide appropriate guidance to Newlands Users on prospective impacts if the QCA approves the anticipated Private Incremental Costs, Aurizon Network has recast the FY2022 Newlands System Reference Tariff in Table 23 to reflect the forecast volumes from the new coal carrying train services paying an access charge that is comprised only of the Minimum Revenue Contribution.

Table 23 Impact of the Private Incremental Costs for a new coal carrying train service on FY22 Newlands System Reference Tariffs

Newlands System	AT1	AT2	AT3	AT4
Newlands Reference Tariffs where the Approved PIC for the new coal carrying train service = 0	1.91	325.41	8.78	1.11
Newlands Reference Tariffs where the Approved PIC for the new coal carrying train service > 0	1.91	325.41	11.87	1.51
% Change	--	--	35.2%	35.3%

4.7 Allocation of Newlands Shared Rail Corridor Renewals Expenditure between Newlands and GAPE Train Services

As noted in Aurizon Network’s FY2022 Maintenance and Renewals Strategy and Budget and in stakeholder submissions on Aurizon Network’s FY2020 Capital Expenditure claim, some Customers have requested further information in relation to Aurizon Network’s approach to allocating shared rail corridor renewals expenditure between Newlands and GAPE Train Services. Aurizon Network has actively engaged with stakeholders to discuss this issue and provided further information.

Aurizon Network maintains that its approach results in economically efficient pricing outcomes for both Newlands System and GAPE Customers for the following reasons:

- > the Newlands and GAPE Reference Tariffs are each less than the respective stand-alone costs and greater than the respective incremental costs for each system and are therefore consistent with the pricing limits;
- > the current Newlands RAB is not cost reflective of the 26 tonne axle load (**TAL**) services currently operating within the Newlands System;
- > the inclusion of the Newlands asset replacement expenditure in the Newlands Reference Tariff progressively transitions the price of the legacy 20TAL system to the more efficient 26TAL cost of service delivery over a long period of time;
- > the annual net impact on the Newlands RAB value and the Newlands System Allowable Revenues does not result in material price shocks and therefore does materially affect allocative or productive efficiency;
- > the resultant GAPE Reference Tariff provides stronger price incentives to maintain and increase the utilisation of the Newlands Coal System at expiry of the GAPE contractual arrangements;
- > the contract and demand positions of Newlands Users materially differ from the pre-GAPE Newlands contracted positions. It is both inefficient and inequitable for new or additional demand to maintain access at an access price which is not reflective of the cost of service delivery;
- > GAPE project costs are not included in the Newlands Reference Tariff and therefore, Aurizon Network’s approach satisfies and remains consistent with the approved cost allocation methodology for the GAPE Project Costs; and
- > It better reflects the significant indirect benefits provided to Newlands Users from the increased above rail efficiency seen through an increase in the average train payload between FY10 and FY20 of 45% and a material increase in competition from system interoperability.

Background

The rail corridor between the Abbot Point port precinct and the Newlands mine junction is a shared rail corridor for Train Services which are subject to both the Newlands Reference Tariff and the GAPE Reference Tariff.

GAPE is not a geographically distinct coal system. In addition to the construction of greenfield track between North Goonyella Junction and Newlands Junction, the scope of the GAPE project included significant upgrades of existing Newlands System Rail Infrastructure. These costs are reflected within the GAPE System Reference Tariff.

The shared Newlands Rail Corridor is comprised of a combination of both old and new assets. The new assets are largely associated with those improvements and upgrades of the GAPE project. Many of the assets replaced or upgraded in the Newlands System during the GAPE project were either life expired or approaching life expiry. This is apparent in the age profiles outlined within the 2013 Condition Based Assessment⁶ with the Newlands Regulatory Asset Base for the majority of track assets becoming fully depreciated by 2024⁷.

In prior capital expenditure claims, RAB roll-forwards and the setting of coal system Reference Tariffs, Aurizon Network has applied, and the QCA has approved, an asset-specific approach to the allocation of asset replacement expenditure based on the coal system in which the relevant asset is reflected within the CQCN Regulatory Asset Base. More simply, if an asset is identified within the Newlands System component of the RAB then the replacement expenditure for that asset is included within the Newlands System. Conversely, if an asset is identified within the GAPE System component of the RAB (which includes assets on the GAPE Link, or those constructed as part of the GAPE project) then the replacement expenditure for that asset is included within the GAPE System.

The purpose of establishing GAPE as a separate Coal System was to identify and allocate the GAPE Project Infrastructure Enhancements to determine a Reference Tariff that would support the contractual arrangements entered into at the time the decision was made to invest in those Infrastructure Enhancements. For all practical purposes, this was comparable to the establishment of an Expansion Tariff for the Newlands System.

Identification of GAPE Infrastructure Enhancements that are shared costs

In relation to the establishment of the GAPE Reference Tariff in FY2012, an asset specific approach was applied. In this regard the GAPE Infrastructure Enhancements represented an incremental expansion of the Newlands System.

Upon completion of the GAPE Infrastructure Enhancements in FY2012, the Newlands System Reference Train service was upgraded to a 26TAL service; a factor that is relevant in the context of assessing whether Aurizon Network's proposed access charges for Newlands and GAPE Train Services comply with the pricing principles of the 2017AU.

In this context, some of the GAPE Infrastructure Enhancements can no longer be considered as incremental costs solely attributable to the GAPE Train Services. While the rail infrastructure comprising the Goonyella to Newlands Connection (i.e. the GAPE Link) is an incremental cost to GAPE Train Services, a significant proportion of the GAPE Infrastructure Enhancements to the Newlands System were shared costs which have been beneficial to both the existing Newlands Users and the GAPE/NAPE Users.

⁶ <https://www.qca.org.au/project/aurizon-network/previous-access-undertakings/2010-access-undertaking-ut3/condition-based-assessment/>

⁷ The Newlands assets that were installed prior to 2010 are subject to a straight-line depreciation profile over the expected physical asset lives.

This arises because the GAPE Infrastructure Enhancements can be categorised as either enhancements which:

- > increased the productive capacity of all train services to facilitate an increase in both train length and payload, associated with an increase in TAL from 20 to 26 (**shared costs**); and
- > increased the available pathing through investment in passing loops, holding roads in Pring and in investment at the Port (**incremental costs**).

In this regard, Aurizon Network has identified those GAPE Infrastructure Enhancements that are strictly associated with the operation of Train Services to a standard of 26TAL, i.e. the shared costs, and has summarised the cost of these projects below in Table 24.

Table 24 GAPE Infrastructure Enhancements for 26TAL Services

Project Scope	Direct Costs [^]
Kaili to Durroburra Duplication [#]	39,786,391
New Euri Creek bridge	6,752,201
Sheep Station Creek Bridge	6,845,060
Existing Track Upgrades	34,260,168
26.5 TAL Rerailing AP-BR	2,784,638
Formation & Ballast Upgrades	45,783,746
Briaba to Collinsville Duplication [#]	62,910,956
McNaughton - BL Upgrade & T/Out Replacement	7,234,174
McNaughton - BL Upgrade - Trackwork	6,305,470
Newlands - BL Upgrade & T/Out Replacement	5,587,293
Sonoma - Turnout Replacement	770,953
Total Cost as at FY2012	\$219,021,056

[^] FY2012 costs excluding project overhead allocations and interest during construction

[#] Duplications were necessary for operation of 26TAL loaded services and unloaded services are routed through the retained 20TAL alignments.

In light of the fact that since FY2012, the Newlands System has operated as a 26TAL Reference Train Service, the above Infrastructure Enhancements can no longer be considered incremental to GAPE Train Services for the purpose of assessing the Stand Alone Costs for Newlands System Users. Not only has the transition to a 26TAL Reference Train Service improved payload productivity for Newlands System Users, but Pre-GAPE Newlands System Users consented to project funded modifications to their loadouts and compensation payments as part of the commercial arrangements. Hence, it is appropriate to assess Newlands Coal System Stand Alone Costs on the basis of a 26TAL Reference Train Service as it reflects the current operating environment in the Newlands Coal System in terms of both the actual assets used and actual operations for Newlands mines.

The current value of the Newlands System RAB is not reflective of a 26TAL service

In developing the GAPE Reference Tariff it was agreed that the GAPE/NAPE Users would be responsible for recovery of the GAPE Infrastructure Enhancements over the term of the GAPE/NAPE Deeds and that an allocation of the shared costs of the Newlands System Enhancements to *existing* Newlands System Users at that time would not be made⁸.

The practical effect of quarantining the Newlands System Enhancements from the Newlands RAB, is that the Newlands Reference Tariff is not a cost reflective tariff as it represents only the alignment, configuration and standard prevailing prior to the GAPE Infrastructure Enhancements, i.e. a 20TAL service. In other words, the Newlands Reference Tariff is not reflective of the cost and quality of the services currently being provided.

Therefore, the current QCA approved approach of including the replacement expenditure of assets within the Newlands Coal System RAB is consistent with the basis for the establishment of the GAPE Reference Tariff. It also has the practical effect of transitioning the Newlands Reference Tariff over time to align with the costs of providing the standard of services currently operating in the Newlands system⁹. The QCA has recognised this principle¹⁰:

“where significant changes from current levels of prices are necessary to recognise shifts in the supply curve or to rationalise prices that, for whatever reason, had been set artificially low.....regulators often choose to ‘phase - in’ the significant changes over a significant period of time”

The application of an allocative approach to the incremental costs of asset replacement expenditure comprising the Newlands Coal System RAB to GAPE Users would therefore be inconsistent with the quarantining of the shared costs of Newlands System Enhancements identified in Table 24 solely to GAPE Users. In other words, an incremental cost approach to the allocation of renewals expenditure on the shared corridor would have also required an allocation of the shared costs associated with the incremental expansion at the time the GAPE Infrastructure Enhancements were approved by the QCA for inclusion in the RAB.

Aurizon Network’s current approved approach to allocating Newlands System renewals expenditure results in economically efficient outcomes

Aurizon Network’s proposed pricing arrangements for Newlands and GAPE Train Services is economically efficient. This is evident by demonstrating that they:

- > are consistent with the pricing limits as per clause 6.6.1 of the 2017AU;
- > meet the efficiency and equity/fairness objectives underpinning the QCA’s Statement of Regulatory Pricing Principles; and
- > are consistent with the expansion pricing principles as per clause 6.4.1 of the 2017AU.

Aurizon Network has provided further information relating to each of these matters below.

⁸ QCA (2013) Draft Decision: Goonyella to Abbot Point Expansion Reference Tariff - Draft Amending Access Undertaking, July, pp. 16-17.

⁹ Regulators typically apply price paths to progressively increase prices over time where the inclusion of the full cost of providing the service would result in a material price shock.

¹⁰ QCA (2013) Statement of Regulatory Pricing Principles, August, p.28.

1. The current approved approach for allocating Replacement Capex is Consistent with the Pricing Limits

The pricing limits are set out in clause 6.6.1 of the Access Undertaking. These limits are intended to ensure that an individual Train Service or combination of Train Services, does not pay an access charge which will result in cross-subsidy between one class of user and another.

The pricing limits are satisfied where the Access Charge for an individual Train Service or combination of Train Services is set at:

1. no less than the level that will recover the expected Incremental Cost of providing Access for that Train Service or that combination of Train Services (as applicable); and
2. no more than the level that will recover the expected Stand Alone Cost of providing Access for that Train Service or that combination of Train Services (as applicable).

In this regard, a cross subsidy could not occur where Newlands Users pay an access price equal to or less than their Stand Alone Cost and GAPE Users pay an access price equal to or greater than their Incremental Costs¹¹.

Condition 1. GAPE Train Services pay an Access Charge greater than the Incremental Costs of providing Access.

Incremental Costs are succinctly defined as:

Those costs of providing Access, including capital (renewal and expansion) costs, that would not be incurred (including the cost of bringing expenditure forward in time) if the particular Train Service or combination of Train Services (as appropriate) did not operate, where those costs are assessed as Efficient Costs and based on the assets reasonably required for the provision of Access.

In this regard, the Incremental Costs of providing Access to GAPE Train Services are only those that would not be incurred without those services operating. Evaluating the relevant capital related incremental costs requires consideration of those assets that would not be required in order to continue to meet the contracted Train Service Entitlements for Newlands Users in the absence of contracted Train Service Entitlements for GAPE Users.

As the shared costs in Table 24 would be necessary to continue to meet the contracted Train Service Entitlements for Newlands Users consistent with the reference service description, then the incremental capital costs for GAPE Train Services would include:

- > The asset comprising the Goonyella to Newlands Connection;
- > The assets comprising the Goonyella System Enhancements;
- > The assets comprising the Newlands System Enhancement less shared costs in Table 24; and
- > An allocation of asset replacement expenditure reflecting activities that are expected to be variable with volume.

For clarity, the above assets are reflected in the 'GAPE RAB – Incremental Cost' line in Figure 1 below.

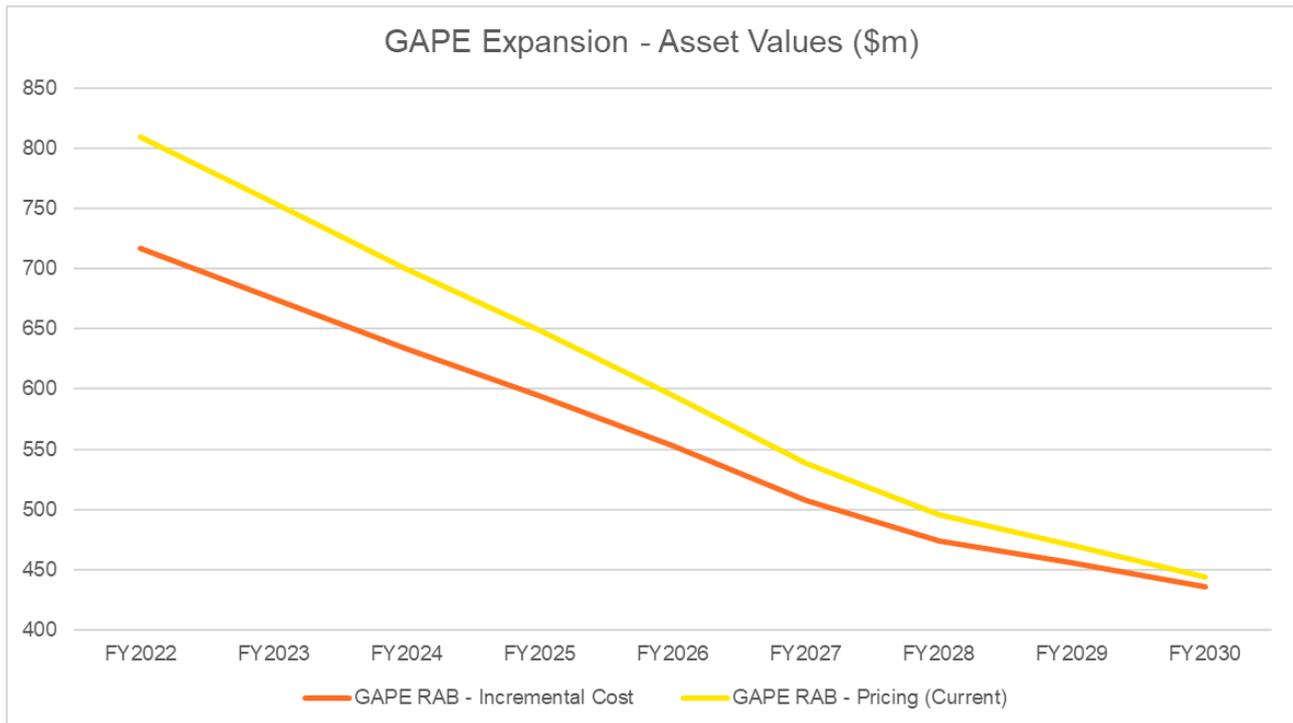
¹¹ It is not necessary to assess whether Newlands Users are paying less than their incremental costs and GAPE Users are paying more than their Stand Alone Costs as that is not the basis of stakeholder queries on the allocations.

Figure 1 demonstrates that Aurizon Network’s current approved approach will see that GAPE Access Charges are set at a level exceeding the expected Incremental Costs of providing Access for GAPE Train Services. This is illustrated by the fact that:

- > the value of the assets in the CQCN RAB used to determine the GAPE Reference Tariff (**GAPE RAB – Pricing (Current)**); is greater than
- > the value of the assets representing the Incremental Costs of providing Access to GAPE Train Services (**GAPE RAB – Incremental Cost**).

It can therefore be concluded that Aurizon Network’s current approved approach is consistent with the 2017AU Pricing Limits.

Figure 1 Comparison of the GAPE Pricing Assets with GAPE Incremental Assets



Condition 2. Newlands Train Services pay an Access Charge that is less than or equal to the Stand Alone Costs of providing Access.

Stand Alone Costs are succinctly defined as:

Those costs that Aurizon Network would incur if the relevant Train Services were the only Train Services provided Access by Aurizon Network, where those costs are assessed as the Efficient Costs for the assets reasonably required for the provision of Access.

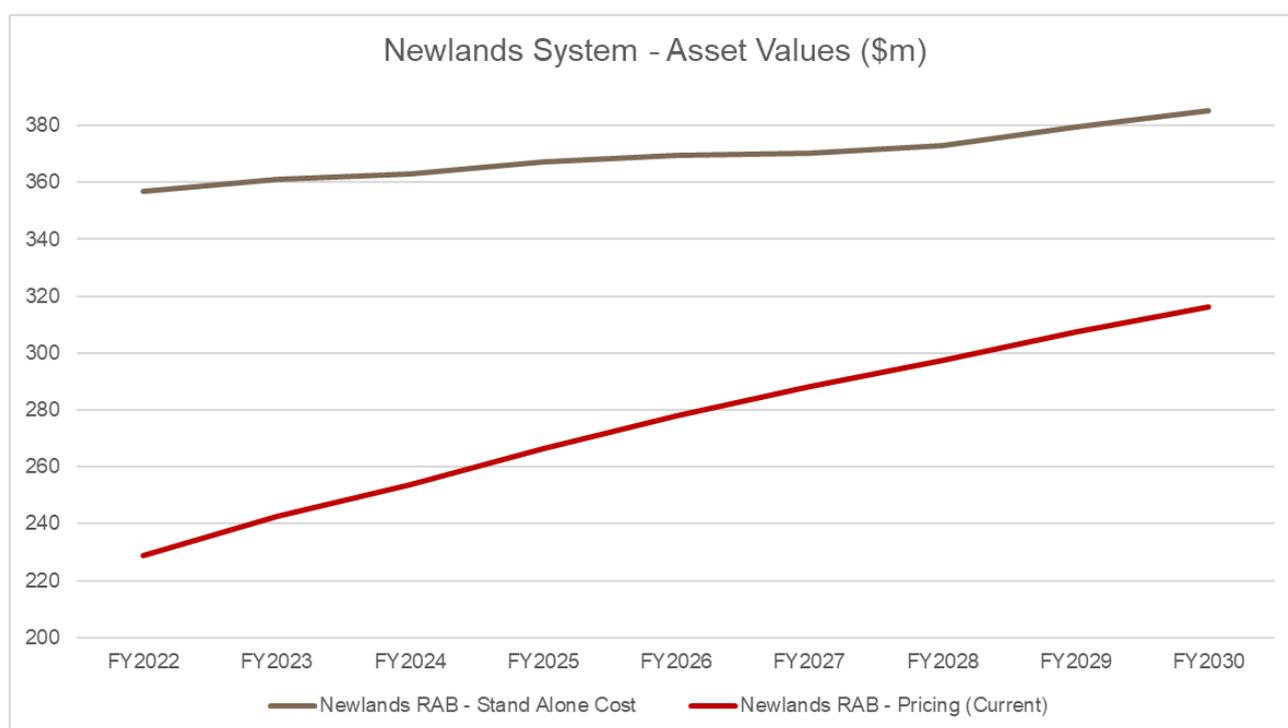
In this regard, the Stand Alone Costs of providing Access to Newlands Train Services are those assets that would be necessary to provide the contracted Train Service Entitlements for Newlands Users consistent with the reference service description.

The assets reasonably required to provide 26TAL train services for contracted tonnes per annum includes:

- > the assets comprising the Newlands Coal System prior to the GAPE Infrastructure Enhancements less the written down value of the existing 20TAL standard sections which were duplicated (i.e. the Kaili to Durroburra and the Briaba to Collinsville duplications);
- > the shared costs of the GAPE Infrastructure Enhancements associated with operation of 26TAL Train Services; and
- > replacement capital expenditure and improvements to the Newlands System assets which were not upgraded to 26TAL as part of the GAPE Project.

As shown in Figure 2, the value of the assets in the CQCN RAB which represents the Stand Alone Costs of providing contracted Train Service Entitlements for Newlands Users consistent with the reference service description exceeds the value of those assets used to determine the Newlands Reference Tariffs.

Figure 2 Comparison of Newlands Pricing Assets with Newlands Stand Alone Costs



As demonstrated by Figure 1 and Figure 2, the current approach to the allocation of asset replacement expenditure to the relevant coal system in which those assets reside is permissible and compliant with the pricing limits as both conditions are satisfied.

2. The current approved approach is consistent with the QCA’s Regulatory Pricing Principles

The QCA’s 2013 Statement of Regulatory Pricing Principles evaluated the impacts of regulatory prices from the perspective of pursuing both efficiency and fairness objectives. Aurizon Network has considered how the inclusion of the Newlands System replacement expenditure in the Newlands RAB and allocation to the Newlands Reference Tariff promotes those objectives.

Regarding the *efficiency objectives* Aurizon Network notes:

- > the current approved approach satisfies the cost allocation tests for subsidy free prices as demonstrated above;

- > the resultant Newlands Reference Tariff from the inclusion of the asset replacement expenditure in the Newlands Coal System RAB more closely aligns that tariff with the economic costs associated with providing that reference train service and aligns with the principle that the price is at least commensurate with the costs of providing the service. Therefore, the asset specific basis applied by Aurizon Network for allocation better satisfies the Pricing Principles in section 168 of the QCA Act than an alternative allocation approach;
- > the current approved approach provides a more efficient price signal to current and future demand for the use of the shared rail corridor (including demand that is not represented by pre-GAPE mining operations) associated with the operation of 26TAL services in the Newlands System;
- > the GAPE Users will continue to pay a Reference Tariff greater than the forward-looking costs that would be avoided if those services did not operate;
- > the GAPE Reference Tariff provides a greater incentive to attract additional GAPE demand and therefore better promotes the objects of the access regime through:
 - promoting increased competition between coal export terminals¹²; and
 - promoting the efficient operation and utilisation of the rail infrastructure comprising the Goonyella to Newlands Connection,
- > Newlands Users were fully compensated for negative externalities¹³ associated with increased network congestion but have obtained substantial benefits from the positive externalities associated with the promotion of a material increase in competition in the rail haulage market associated with investment in the:
 - Goonyella to Newlands Connection and the increased interoperability of rail operations within the CQCN¹⁴; and
 - 26TAL upgrades and access to a deeper market for 26TAL wagons and increased asset fungibility;
- > Aurizon Network has not received information that suggests an alternative allocation approach would result in an increased demand for Newlands Train Services, nor that Aurizon Network’s current approved approach has raised prices to the point that End User production decisions are being distorted. Aurizon Network has also not received information to demonstrate that an alternate allocation approach would result in an improvement in efficiency compared with the continuation of Aurizon Network’s current allocation methodology; and
- > Aurizon Network’s revenue from regulated Reference Tariffs remains within the global pricing limits constrained by the value of the CQCN RAB.

Regarding the *equity/fairness objectives* Aurizon Network notes:

- > changes in the Newlands demand profile since the commencement of GAPE Reference Tariff substantially diminishes the relevance of the fairness principle as the basis for rejecting progressive changes in the Newlands System Reference Tariff over an extended period of time.
- > As illustrated by Figure 3 below:
 - an existing Newlands Pre-GAPE Access Holder has materially reduced its contracted TSEs by more than [REDACTED];

¹² The QCA Recommendation for the declaration of services provided by the Dalrymple Bay Coal Terminal determined that the services provided by Abbot Point Coal Terminal were not close substitutes based on *current* supply chain cost relativities. However, for some mines at the expiry of the GAPE Deeds depreciated value of the GAPE RAB value will increase demand for GAPE services at the margin.

¹³ The GAPE Infrastructure Enhancements included approximately \$40 million in compensation payments to existing Newlands Users to offset the expected additional costs associated with increasing the below rail transit time threshold from 124% to 160%

¹⁴ QCA (2018) Draft Recommendation - Part A: Aurizon Network declaration review, December, p.15

- an existing Newlands Pre-GAPE Access Holder is utilising [REDACTED] of its contracted TSEs;
- new and additional contracted TSEs (~[REDACTED] of total contracted Newlands demand) after project completion have no equity or fairness claim to retaining access to a Reference Tariff based on the 20TAL Newlands RAB when operating 26TAL services,
- It should be noted that approximately [REDACTED] of FY22 contract volumes in the Newlands System relates to Pre-GAPE contracted volume, decreasing to [REDACTED] by FY25.

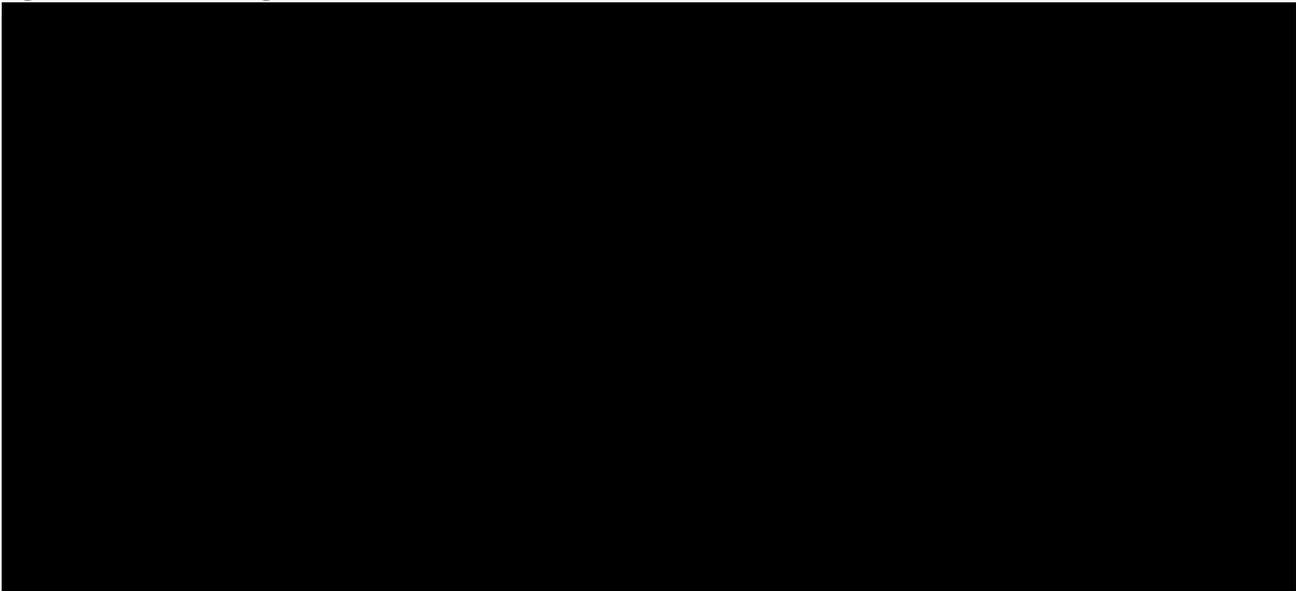
And even so:

- > the resultant increase in the Newlands Reference Tariff is progressive and consistent with an efficient glide path transition of the tariff to the Stand Alone Costs. This is consistent with the QCA assessment which noted:

... empirical studies of fairness seem to show that the concept of fairness is not so much related to a particular tariff structure or cost allocation as it is to changes in that tariff structure or cost allocation. It seems that virtually any cost allocation could be considered to be fair if consumers have had a long enough period of adjustment.¹⁵

- > the pre-GAPE project Newlands Users are not being required to contribute towards the GAPE project costs and therefore the current allocation approach remains consistent with the reference transaction; and
- > the GAPE customers will continue to pay an access charge consistent with the recovery of the GAPE Infrastructure Enhancements.

Figure 3 Relative Changes in Newlands Demand



On balance, the current approved approach of allocating Newlands Replacement capex to the Newlands Reference Tariffs is the most effective way of promoting the efficiency and equity/fairness principles.

3. The current approved approach is consistent with the Expansion Pricing Principles

The introduction to this section clarified that the underlying basis of establishing the GAPE Reference Tariff was to more closely align the regulatory pricing arrangements to support the contractual arrangements entered into at the time the decision was made to invest in those Infrastructure Enhancements. Aurizon

¹⁵ QCA (2013) Statement of Regulatory Pricing Principles, August, p.28

Network notes that these arrangements are largely consistent with the Expansion Pricing Principles in clause 6.4.1 of the 2017AU.

The alternative to establishing the GAPE System and GAPE Reference Tariff would have been to include all project costs in the Newlands RAB and apply a system premium for the GAPE/NAPE expansion customers. Under this approach the asset replacement expenditure on the common corridor would be common costs and added to the Newlands RAB. The accepted approach for the treatment of these costs was to allocate the costs to the System Reference Tariff and the System Premium which would be assessed against the revised System Reference Tariff.

This approach has the practical effect of promoting tariff equivalence between the lowest and the highest Reference Tariff for the relevant cost system. Therefore, in the context of the asset replacement expenditure of assets comprising the Newlands RAB, under a common System Reference Tariff approach for Newlands and GAPE Users those replacement costs would be included in the Newlands Reference Tariff until the average cost of using the same infrastructure for the same service was equivalent. In other words, the average cost of operating a GAPE service from the Newlands Junction to Abbot Point should be comparable to the average cost of operating a comparable service on the same shared corridor.

The following table shows the comparable average costs for GAPE and Newlands Users from the Newlands Junction to Abbot Point under their respective access charges. As can be seen, the average cost for GAPE Users is already 12% higher than Newlands Users for the use of the same shared corridor.

Table 25 Comparable average cost of access to the shared corridor – Newlands Junction to Abbot Point

FY2021 Average cost for use of shared corridor	(\$/GTK'000)
Newlands Users	14.11
GAPE Users	15.75

Conclusion

For the reasons stated above, Aurizon Network maintains that its current approved approach of allocating renewal expenditure in the shared Newlands rail corridor results in efficient prices which are consistent with the pricing principles outlined in Part 6 of the 2017AU and better satisfy the economic efficiency and fairness objectives, which ultimately underpin the QCA's Statement of Regulatory Pricing Principles.

Aurizon Network remains committed to engaging with Customers on this matter, and would welcome the opportunity to discuss any aspect of the above submission with them.

5. Proposed Allowable Revenues and Reference Tariffs

5.1 Approved Allowable Revenues

Schedule F of the 2017AU, provides the FY2022 Allowable Revenues for each Coal System. These values were most recently approved by the QCA as part of its Final Decision on the Meteor Downs South Pricing Draft Amending Access Undertaking, dated 17 December 2020.

The current QCA-approved Allowable Revenues for FY2022 are:

Table 26 FY2022 Allowable Revenues (\$m) – approved on 17 December 2020

System	AT2-4	AT5
Blackwater	370.9	78.8
Goonyella	284.1	68.2
Moura	46.3	--
Newlands	32.4	--
GAPE	123.9	--
Total (\$m)	857.7	147.0

5.2 Aggregate adjustments to FY2022 Allowable Revenues

The aggregate adjustments (as outlined in Sections 3 and 4) for each Coal System are as follows:

Table 27 Aggregate adjustments – FY2022

System	AT2-4	AT5
Blackwater	(18.7)	(3.7)
Goonyella	(6.8)	3.3
Moura	5.6	--
Newlands	1.6	--
GAPE	1.0	--
Total (\$m)	(17.3)	(0.4)

5.3 Proposed FY2022 Allowable Revenues

Aurizon Network submits the following adjusted Allowable Revenues to the QCA for approval:

Table 28 Proposed Allowable Revenues – FY2022

System	AT2-4	AT5
Blackwater	352.2	75.0
Goonyella	277.2	71.5
Moura	51.9	--
Newlands	34.1	--

System	AT2-4	AT5
GAPE	124.9	--
Total (\$m)	840.3	146.6

5.4 Proposed FY2022 Reference Tariffs

Reference Tariffs are set such that Aurizon Network can recover the approved Allocation Revenues from the approved System Forecasts.

Aurizon Network submits the following proposed FY2022 Reference Tariffs to the QCA for approval. The proposed Reference Tariffs are a function of the proposed Allowable Revenues outlined in Table 28 above, and the relevant volume metrics derived from the revised System Forecasts in Table 8.

Table 29 Proposed Reference Tariffs – FY2022

System	AT1	AT2	AT3	AT4	AT5	EC	QCA Levy	IE Pass Through Costs
Blackwater	0.99	2,429.76	7.18	2.56	2.98	0.83	0.0033	0.01485
Goonyella	0.68	1,539.39	5.09	1.03	1.97	0.83	0.0033	0.01485
Moura	1.84	719.63	11.11	1.80	--	--	0.0033	0.01485
Newlands	1.91	325.41	8.78	1.11	--	--	0.0033	0.01485
GAPE	1.54	15,106.30	1.24	1.91	--	--	0.0033	0.01485

For clarity, Aurizon Network does not propose any amendments to either the AT₁ or AT₂ Reference Tariffs.

Appendix A: Amended 2017 Access Undertaking (clean)

Appendix B: Amended 2017 Access Undertaking (mark-up)

Appendix C: FY22 Maintenance and Renewal Strategy and Budget