

Aurizon Network 2017 Access Undertaking

Annual review of Reference Tariffs – FY2021



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1. Introduction

Background

Aurizon Network's 2017 Access Undertaking (**2017AU**) was approved by the Queensland Competition Authority (**QCA**) on 19 December 2019.

The 2017AU provides:

- Allowable Revenues;
- volume forecasts; and
- Reference Tariffs,

for each Coal System and for each year of the Term. These QCA-approved values for financial year (**FY**) 2018 to FY2023 are outlined in Schedule F of the 2017AU.

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.

Reference Tariffs 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 of the Term 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.

Annual review of Reference Tariffs for FY2021

This submission is provided to the QCA in accordance with Schedule F, clause 4 of the 2017AU. It sets out the methodology, data and assumptions that have been used to review FY2021 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 FY2021 Reference Tariffs

Schedule F Reference	Adjustment	Included in this submission?	Description
4.1(a)(i)	Revenue Adjustment Amount (Revenue Cap) for FY2019	✘	While the inclusion of this variation is provided for under Schedule F, 4.1(a)(i), the FY2019 Revenue Cap has already been incorporated into FY2020 Allowable Revenues via the Consolidation DAAU, approved by the QCA on 21 February 2020.
4.1(a)(ii)	Capital Expenditure Allowable Revenue Adjustment for FY2018	✔	This adjustment is determined in accordance with Schedule E, clause 5(b). It adjusts Allowable Revenues to reconcile the difference between Approved Capital Expenditure for FY2018 and the respective Capital Indicator for that year.

Schedule F Reference	Adjustment	Included in this submission?	Description
4.1(b)(i)	Revised volume forecasts for FY2021	✓	Aurizon Network proposes a revised volume forecast for the CQCN of 239.2 million tonnes (mt). The details of the methodology, data and assumptions used to estimate the revised volume forecast for each Coal System are outlined in section 2 of this submission.
4.1(b)(v)	Proposed Maintenance Indicator	✓	Aurizon Network has updated the Maintenance Indicator for each Coal System to reflect the Approved [^] Maintenance Strategy and Budget.
4.1(b)(vi)	Proposed Capital Indicator	✓	Aurizon Network has updated the Capital Indicator for each Coal System to reflect the Approved [^] Renewals Strategy and Budget.
4.1(b)(vii)(F)	Tax Allowance	✓	The tax allowance is a computation of the post-tax revenue model and will be updated to reflect the changes proposed within this submission.
4.1(b)(viii)	Forecast IE Pass Through Cost	✗	At the time of submission, the Independent Expert (IE) has not advised Aurizon Network of the forecast IE Pass Through Cost. Once known, Aurizon Network will notify the QCA and these costs will constitute an Endorsed Variation in accordance with Schedule F, clause 5.2(d).
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 for FY2021.

[^] The Maintenance Strategy and Budget and Renewals Strategy and Budget were approved by the RIG on 14 February 2020. Copies of the Approved Maintenance and Renewals Strategy and Budget and letter of notification from the Chair of the Rail Industry Group are provided in Appendix C and D.

Aurizon Network has applied the adjustments outlined in Table 1 to review Reference Tariffs and Allowable Revenues for each Coal System. The proposed System Forecasts, Allowable Revenues and Reference Tariffs for FY2021 are summarised below. Please note that minor variances may exist due to rounding. Unless otherwise stated, capitalised terms in this submission have the meaning defined in the 2017AU.

System Forecasts

The proposed System Forecasts for the Central Queensland Coal Network (CQCN) for FY2021 are summarised in the table below.

Table 2. Proposed System Forecasts – FY2021

System	Net Tonnes	GTK'000
Blackwater	66.1	37,815,876
Goonyella	124.5	40,176,589
Moura	16.5	4,294,067
Newlands	13.2	2,691,284
GAPE	18.9	9,579,993
Total	239.2	94,557,809

A discussion of the methodology and information relied upon to arrive at the proposed System Forecasts is provided in section 2 of this submission.

Allowable Revenues

The proposed AT₂₋₄ and AT₅ Allowable Revenues for the CQCEN are summarised in the table below.

Table 3. Proposed Allowable Revenues – FY2021 (\$m)

System	AT2-4	AT5
Blackwater	357.9	76.6
Goonyella	282.6	65.9
Moura	49.9	--
Newlands	32.3	--
GAPE	124.7	--
Total (\$m)	847.3	142.5

It should be noted that these Allowable Revenues for FY2021 exclude the Revenue Cap adjustment amounts for FY2019, which have already been incorporated into FY2020 Allowable Revenues via the Consolidation DAAU. This approach was approved by the QCA on 21 February 2020.

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 CQCEN are summarised in the table below.

Table 4. Proposed Reference Tariffs – FY2021

System	AT1	AT2	AT3	AT4	AT5	EC	QCA Levy	IE Fee
Blackwater	0.97	2,373.51	6.86	2.45	2.85	0.82	0.01004	0.00
Goonyella	0.67	1,503.76	4.86	0.99	1.71	0.82	0.01004	0.00
Moura	1.80	702.97	8.62	1.40	--	--	0.01004	0.00
Newlands	1.88	317.88	9.25	1.18	--	--	0.01004	0.00
GAPE	1.51	14,756.57	1.35	1.95	--	--	0.01004	0.00

It should be noted that the proposed AT₃, AT₄ and AT₅ Reference Tariffs for FY2021 exclude the Revenue Cap adjustment amounts for FY2019, which have already been incorporated into FY2020 Allowable Revenues via the Consolidation DAAU, approved by the QCA on 21 February 2020.

Furthermore, at the time of drafting, the IE has not advised Aurizon Network of the forecast IE Pass Through Cost. Once known, Aurizon Network will notify the QCA and these costs will constitute an Endorsed Variation in accordance with Schedule F, clause 5.2(d).

Form of Submission

The submission outlines all matters that are relevant to the Annual review of Reference Tariffs for FY2021.

- Section 2 sets out the revised System Forecasts for each Coal System and contains the methodology, data and assumptions used to determine them;
- Section 3 discusses the matters that have a direct impact on FY2021 Allowable Revenues, such as the:
 - Capital Expenditure Allowable Revenue Adjustment;
 - revised Maintenance Indicator; and
 - revised Capital Indicator;
- Section 4 discusses other relevant matters for consideration; and
- Section 5 shows the combined impact of each proposed adjustment on FY2021 Allowable Revenues and Reference Tariffs

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

- Appendix A: amended UT5 Access Undertaking (clean)
- Appendix B: amended UT5 Access Undertaking (mark-up)
- Appendix C: Approved Maintenance and Renewal Strategy and Budget
- Appendix D: Letter from the Chair of the Rail Industry Group

Aurizon Network confirms that this submission and all appendices are presented in a form that is suitable for publication should the QCA choose to do so.

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 contains 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.

For FY2021, Aurizon Network proposes to reduce CQCN volume forecasts from 249.2 mt to 239.2 mt. The proposed changes for each Coal System are outlined in the following table.

Table 5. Proposed FY2021 Regulatory Volume Forecasts

FY2021 Volume Forecast (mt)	Approved	Proposed	Variance
Blackwater	69.2	66.1	(3.1)
Goonyella	131.5	124.5	(6.9)
Moura	16.5	16.5	--
Newlands	13.2	13.2	--
GAPE	18.9	18.9	--
Total	249.2	239.2	(10.0)

Aurizon Network notes that the proposed CQCN forecast of 239.2 mt varies from the forecast of 245 mt that was assumed during the development of the Approved Maintenance and Renewal Strategy and Budget. The variance essentially comes down to timing differences. Aurizon Network's submitted its draft Maintenance and Renewal Strategy and Budget to the Rail Industry Group (**RIG**) on 30 November 2019. The volume forecast assumptions underpinning the draft Maintenance Strategy and Budget was set prior to that.

It should be noted that the requirement to submit a revised volume forecast by 28 February of the year prior to raiing still presents challenges in relation to forecast accuracy. The forecasting methodology, as described below, considers actual coal tonnes railed until 30 January 2020. Consequently, Aurizon Network would welcome the QCA's independent review of the proposed forecast.

Regulatory System Forecasts – approved vs actual

During its investigation of Aurizon Network's 2017 Draft Access Undertaking, the QCA engaged Resource Management International (**RMI**) to advise on the reasonableness of Aurizon Network's coal volume forecasts for the UT5 Term.¹ The RMI report was dated May 2017 and initially published at the same time as the UT5 Draft Decision on 15 December 2017. Aurizon Network expressed concerns that the RMI volume forecasts were too high throughout the UT5 consultation process.

Table 5 sets out the QCA approved volume forecasts by system as provided under the UT5 Final Decision. These volumes draw from the work of RMI and form the basis for calculation of System Reference Tariffs for the UT5 Term in accordance with Schedule F of the 2017AU.

¹ Queensland Competition Authority. Final Decision. Aurizon Network's 2017 draft access undertaking. December 2018

Table 6. Volume forecasts by system – UT5 Final Decision (million tonnes)

System	FY2018	FY2019	FY2020	FY2021
Blackwater	64.6	67.2	68.2	69.2
Goonyella	127.6	131.0	131.5	131.5
Moura	11.5	15.0	16.5	16.5
Newlands	11.7	13.2	13.2	13.2
GAPE	15.9	18.9	18.9	18.9
Total	231.2	245.2	248.2	249.2

Source: Queensland Competition Authority UT5 Final Decision

Table 6 below compares the QCA-approved regulatory forecast for the CQCN to actual billed tonnes for FY2018, FY2019 and Aurizon Network’s latest forecast for FY2020.

Table 7. CQCN Regulatory Volume Forecasts

CQCN Forecast – Net Tonnes	FY2018	FY2019	FY2020	FY2021
QCA-approved regulatory forecast	231.2	245.2	240.0*	249.2
Actual Tonnes	229.6	232.7		

* On 21 February 2020, the QCA approved Aurizon Network’s Consolidation DAAU, which included a reduction in FY2020 regulatory volume forecasts from 248.2 mt to 240.0 mt.

Based on the latest available information, it is apparent that the approved regulatory forecast for FY2021 does not reflect prevailing market conditions. Aurizon Network considers that it would be more realistic to reduce FY2021 volume forecasts for the purposes of resetting FY2021 Access Tariffs.

Methodology for developing the revised System Forecasts

Aurizon Network has adopted the following methodology for developing the revised System Forecasts for FY2021. Please note that this same methodology was used for calculating the FY2020 forecast tonnages that the QCA approved on 21 February 2020.

Step 1: Identify actual tonnes railed YTD

July 2019 to January 2020	136.5 mt
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Step 2: Evaluate accuracy of prior year forecasts (Forecast Accuracy)

$\left(\frac{\text{FY18} + \text{FY19 Actual CQCN Tonnes}}{\text{FY18} + \text{FY19 UT5 FD Forecast CQCN Tonnes}} \right)$	$\left(\frac{229.5 + 232.7}{231.2 + 245.2} \right) = 97.0\%$
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Step 3: Use Step 2 to update the QCA's UT5 Final Decision forecast for each Origin/Destination pair for remainder of the FY (February – June 2020)

$\left(\frac{UT5\ FD}{FY21\ Forecast} \right) \times Forecast\ Accuracy$ $\times Remaining\ Months$	$\left(\frac{249.2}{12} \right) \times 97.0\% \times 5$ $= 100.7\ mt$
--	--

Step 4: Combine Step 1 (YTD Actual) + Step 3 (Updated forecast for remaining months)

Modelled CQCN forecast (mt)	237.2 mt
Moura, Newlands and GAPE to remain unchanged from the QCA's 2018 Decision (see below)	+2.0 mt
Proposed CQCN forecast (mt)	239.2 mt

The application of this forecasting methodology is consistent with the approach used to estimate revised volume forecasts for the QCA-approved FY2020 volumes and does not result in a material change for GAPE or the Newlands system. As a result, Aurizon Network does not propose to amend the forecast for GAPE or Newlands users because the QCA's 2018 Decision forecast appears reasonable.

As at 31 January 2020, the QCA's 2018 Decision forecast for the Moura system is likely to be at the high end of the forecast range. Accordingly, Aurizon Network has left Moura system forecasts unchanged.

Aurizon Network's revised System Forecasts for FY2021 are summarised in the table below.

Table 8. Proposed System Forecasts – FY2021

System	Net Tonnes	GTK'000
Blackwater	66.1	37,815,876
Goonyella	124.5	40,176,589
Moura	16.5	4,294,067
Newlands	13.2	2,691,284
GAPE	18.9	9,579,993
Total	239.2	94,557,809

The revised net tonne forecasts for each Coal System are then converted to Gross Tonne Kilometres (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 remains aligned to the QCA's 2018 Decision.

GTK forecasts for the Blackwater and Newlands systems were then 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 above, Aurizon Network submits the following adjustments to FY2021 Allowable Revenue to the QCA for approval:

- Capital Expenditure Allowable Revenue Adjustment;
- revised Maintenance Indicator; and
- revised Capital Indicator.

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

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 Revenues 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); and
- tax depreciation.

Aurizon Network's FY2018 Capital Expenditure claim was approved by the QCA on 24 October 2019. The QCA approved capital expenditure of \$212.6² million for inclusion into the regulatory asset base. The difference between the Approved Capital Expenditure and the Capital Indicator for FY2018 for each Coal System are outlined in the following table. These values are expressed in 'start of year' terms.

Table 9. Approved Capital Expenditure – FY2018 (\$m)

FY2018	Capital Indicator	Approved Capital Expenditure	Variance
Blackwater	98.0	88.0	(10.0)
Goonyella	92.7	71.9	(20.8)
Moura	9.1	18.4	9.4
Newlands	13.2	19.7	6.5
GAPE	5.8	8.7	2.9
Total (\$m)	218.6	206.7	(11.9)

Aurizon Network has updated its financial models to reflect the Approved Capital Expenditure for FY2018 and the associated RAB roll-forward (which was approved by the QCA on 20 December 2019) and determined the relevant difference in Allowable Revenues in accordance with Schedule E, clause 5(b).

² The QCA-approved \$212.6 million in 'mid-year' terms, which is equivalent to \$206.7 million in 'start of year' terms.

The resulting Allowable Revenue differences for each year are then accrued at the Discount Rate (i.e. the approved WACC) for inclusion in FY2021 Allowable Revenues.

The Capital Expenditure Allowable Revenue Adjustments applicable to FY2021 are outlined below.

Table 10. Capital Expenditure Allowable Revenue Adjustment to FY2021 Allowable Revenues (\$m)

System	AT2-4	AT5
Blackwater	1.6	(0.2)
Goonyella	(0.7)	0.4
Moura	3.2	--
Newlands	2.4	--
GAPE	0.6	--
Total (\$m)	7.1	0.2

While Table 9 shows that Approved Capital Expenditure for FY2018 was lower than the FY2018 Capital Indicator in absolute terms, the Allowable Revenues associated with the Approved Capital Expenditure was higher than forecast as illustrated in Table 10. The increase in Allowable Revenues is attributable to the rate of depreciation associated with each individual asset class within the Approved Capital Expenditure for FY2018. Essentially, the average asset life attributable to the Approved Capital Expenditure was lower than the 20-year asset life assumed for the FY2018 Capital Indicator.

Maintenance Indicator

The inclusion of this adjustment is permitted under Schedule F, 4.1(b)(v).

On 14 February 2020, the Chair of the Rail Industry Group notified Aurizon Network of the following voting outcomes:

Table 11. Final draft Maintenance Strategy and Budget - voting outcomes

System	Special Majority of End Users for that coal system voted to:
Blackwater	Approve Aurizon Network's final draft Maintenance Strategy and Budget
Goonyella	Approve Aurizon Network's final draft Maintenance Strategy and Budget
Moura	Approve Aurizon Network's final draft Maintenance Strategy and Budget
Newlands / GAPE	Approve Aurizon Network's 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 is consistent with the Approved Maintenance Strategy and Budget and accordingly, should be approved by the QCA.

A comparison between the QCA-approved Maintenance Indicator and the proposed Maintenance Indicator for FY2021 for each Coal System is as follows:

Table 12. FY2021 Maintenance Indicator – Direct + Indirect (\$m)

System	Current Maintenance Indicator – FY2021	Proposed Maintenance Indicator – FY2021	Variance
Blackwater	71.4	66.8	(4.6)
Goonyella	69.0	64.4	(4.5)
Moura	12.3	13.0	0.7
Newlands	3.4	3.2	(0.2)
GAPE	12.1	11.4	(0.7)
Total (\$m)	168.2	158.9	(9.4)

Aurizon Network has updated Allowable Revenues and Reference Tariffs to reflect the proposed Maintenance Indicator for FY2021 and each subsequent year to FY2023. Please note that the proposed Maintenance Indicators for FY2022 and FY2023 will be refined through future RIG engagements prior to the commencement of the respective financial years. The engagements will be conducted in accordance with clause 7A.11.3 of the 2017AU.

As outlined in section 2 above, the proposed CQC forecast of 239.2 mt varies from the forecast of 245 mt that was assumed during the development of the Approved Maintenance and Renewal Strategy and Budget. Aurizon Network notes that the change in forecast maintenance costs attributable to the reduction in forecast volumes is immaterial. Consequently, Aurizon Network has not sought to amend the Approved Maintenance budget.

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 is inconsistent 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.

Capital Indicator

The inclusion of this adjustment is permitted under Schedule F, 4.1(b)(vi). On 14 February 2020, the Chair of the Rail Industry Group notified Aurizon Network of the following voting outcomes:

Table 13. Final draft Renewals Strategy and Budget - voting outcomes

System	Special Majority of End Users for that coal system voted to:
Blackwater	Approve Aurizon Network's final draft Renewals Strategy and Budget
Goonyella	Approve Aurizon Network's final draft Renewals Strategy and Budget
Moura	Approve Aurizon Network's final draft Renewals Strategy and Budget
Newlands / GAPE	Approve Aurizon Network's 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 and accordingly, should be approved by the QCA.

A comparison between the QCA-approved Capital Indicator and the proposed Capital Indicator for FY2021 for each Coal System is outlined in the following table. Please note that these values are expressed in 'Start of Year' terms.

Table 14. FY2021 Capital Indicator (\$m)

System	Current Capital Indicator – FY2021	Proposed Capital Indicator – FY2021	Variance
Blackwater	112.8	112.6	(0.2)
Goonyella	98.9	110.0	11.1
Moura	10.6	15.0	4.4
Newlands	6.7	20.7	14.1
GAPE	1.9	--	(1.9)
Total (\$m)	231.0	258.3	27.4

Aurizon Network has updated Allowable Revenues and Reference Tariffs to reflect the proposed Capital Indicator for FY2021 and each subsequent year to FY2023. Please note that the proposed Capital Indicators for FY2022 and FY2023 will be refined through future RIG engagements prior to the commencement of the respective financial years. The engagements will be conducted in accordance with clause 7A.11.3 of the 2017AU.

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 FY2021. These matters are briefly discussed below.

Revenue Adjustment Amount (Revenue Cap) for FY2019

While the inclusion of this variation is provided for under Schedule F, 4.1(a)(i), the FY2019 Revenue Cap has already been incorporated into FY2020 Allowable Revenues via the Consolidation DAAU, approved by the QCA on 21 February 2020.

For clarity, this adjustment has not been included within the proposed Allowable Revenues for FY2021.

Forecast IE Pass Through Cost

While the inclusion of this variation is provided for under Schedule F, 4.1(b)(viii), at the time of submission, the Independent Expert (IE) has not advised Aurizon Network of the forecast IE Pass Through Cost.

For clarity, this adjustment is not included within the scope of this submission. Once known, Aurizon Network will notify the QCA and these costs will constitute an Endorsed Variation in accordance with Schedule F, clause 5.2(d).

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 FY2021. The tax allowance will be updated to reflect, and ensure consistency with, all proposed changes within this submission that impact Allowable Revenues.

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.³ 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.⁴

The latest pricing notifications received from Transmission Network Service Providers (TNSP) suggests that FY2021 connection and transmission charges will be lower than originally forecast in the 2017AU. Aurizon Network proposes to pass through these reductions to customers as part of this submission.

³ Queensland Competition Authority. Final Decision. Aurizon Network's 2017 draft access undertaking. December 2018.

⁴ Ibid.

Table 15. FY2021 TNSP costs (\$m)

System	Current	Proposed	Variance
Blackwater	27.1	26.5	(0.6)
Goonyella	33.1	32.1	(1.0)
Total (\$m)	60.2	58.7	(1.5)

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 FY2021, which was based on forecast financial inputs. These inputs have since been updated to reflect more recent information. The latest pricing notifications and the impact of the proposed FY2021 volume reset result in electric energy charges that are lower than originally forecast in the 2017AU. For clarity, the proposed electric energy charges include an updated forecast of variable TNSP costs, as provided for in the 2019 Electric Traction DAAU, approved by the QCA on 18 July 2019.

The net impact of the latest pricing notifications and variable TNSP charges on the EC Tariff is outlined in the table below.

Table 16. FY2021 Electric Energy Charges (\$m)

Electric Energy (\$m)	2017AU	Updated Forecast	Variance
FY2021	60.5	54.6	(5.9)

For the purpose of setting a revised EC tariff for FY2021, Aurizon Network has taken into consideration the proposed FY2021 volume reset. The resulting EC tariff is as follows:

Table 18. FY2021 EC Tariff

EC Tariff (\$/’000 egtk)	Current	Proposed	Variance
FY2021	0.86	0.82	(0.04)

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 17. Composition of proposed electric energy charge

Cost component	\$m	\$/’000 egtk
Consumption and Supply	39.2	0.59
Environment Compliance Charge	10.0	0.15
Variable Connection Charge	5.3	0.08
Total (\$m)	54.6	0.82

5. Proposed Allowable Revenues and Reference Tariffs

Approved Allowable Revenues

On 19 December 2019, the QCA approved Aurizon Network's 2017AU, which included FY2021 Allowable Revenues for each Coal System. The QCA-approved Allowable Revenues are:

Table 19. FY2021 Allowable Revenues (\$m) – approved 19 December 2019

System	AT2-4	AT5
Blackwater	361.7	78.1
Goonyella	283.6	67.0
Moura	45.7	--
Newlands	26.7	--
GAPE	126.0	--
Total (\$m)	843.7	145.0

Aggregate adjustments to FY2021 Allowable Revenues

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

Table 20. Aggregate adjustments – FY2021 (\$m)

System	AT2-4	AT5
Blackwater	(3.8)	(1.5)
Goonyella	(1.0)	(1.1)
Moura	4.2	--
Newlands	5.6	--
GAPE	(1.3)	--
Total (\$m)	3.6	(2.6)

Proposed FY2021 Allowable Revenues

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

Table 21. Proposed Allowable Revenues – FY2021 (\$m)

System	AT2-4	AT5
Blackwater	357.9	76.6
Goonyella	282.6	65.9
Moura	49.9	--
Newlands	32.3	--
GAPE	124.7	--
Total (\$m)	847.3	142.5

Proposed FY2021 Reference Tariffs

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

Aurizon Network submits the following proposed FY2021 Reference Tariffs to the QCA for approval. The proposed Reference Tariffs are a function of the proposed Allowable Revenues outlined in table 21 above, and the relevant volume metrics derived from the revised System Forecasts in table 8.

Table 22. Proposed Reference Tariffs – FY2021

System	AT1	AT2	AT3	AT4	AT5	EC	QCA Levy	IE Fee
Blackwater	0.97	2,373.51	6.86	2.45	2.85	0.82	0.01004	0.00
Goonyella	0.67	1,503.76	4.86	0.99	1.71	0.82	0.01004	0.00
Moura	1.80	702.97	8.62	1.40	--	--	0.01004	0.00
Newlands	1.88	317.88	9.25	1.18	--	--	0.01004	0.00
GAPE	1.51	14,756.57	1.35	1.95	--	--	0.01004	0.00

For clarity, Aurizon Network does not propose to make any amendments to either the AT₁ or AT₂ Reference Tariffs. As noted in section 4 above, the IE Fee will remain at \$0 until such time as the IE has advised Aurizon Network of the forecast IE Pass Through Cost, and the Endorsed Variation has been approved in accordance with Schedule F, clause 5.2(d).

Appendix A: Amended UT5 Access Undertaking (clean)

Appendix B: Amended UT5 Access Undertaking (mark-up)

Appendix C: Approved Maintenance and Renewal Strategy and Budget

Appendix D: Letter from the Chair of the Rail Industry Group
