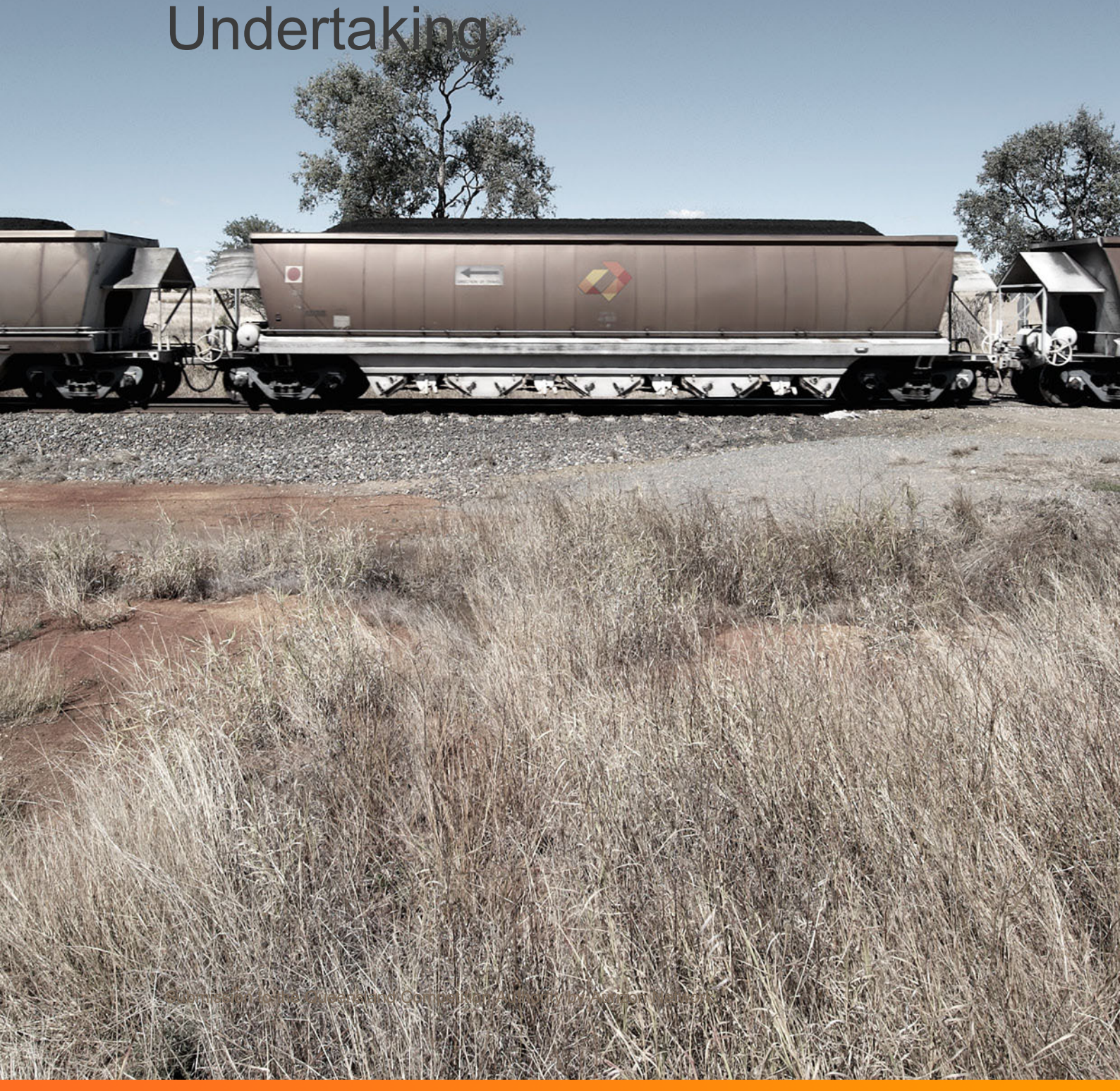


# Aurizon Network

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25 October 2019

## FY2020 Volume Reset Draft Amending Access Undertaking





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## Executive Summary

On 21 February 2019, the Queensland Competition Authority (**QCA**) approved Aurizon Network's 2017 Access Undertaking (**UT5**) for the term 1 July 2017 to 30 June 2021 (**UT5 Term**). This Draft Amending Access Undertaking (**FY2020 Volume Reset DAAU**) has been prepared in accordance with Section 142 of the *Queensland Competition Authority Act 1997* (**QCA Act**) and seeks the QCA's approval to:

### 1. Reset FY2020 volume forecasts

For Financial Year (**FY**) 2020, the QCA approved a volume forecast for the Central Queensland Coal Network (**CQCN**) of 248.2 million tonnes (**mt**). This volume forecast was primarily determined by the QCA's consultant and based on information available as at May 2017.

Based on the latest available information, including volumes railed for the year-to-date (**YTD**), Aurizon Network expects to rail approximately 240.0 mt in FY2020. The forecast volume shortfall is primarily driven by the Blackwater and Goonyella systems and will result in the following outcomes:

- > Aurizon Network materially under-recovering its FY2020 Allowable Revenues; and
- > FY2020 Revenue Adjustment Amount (**Revenue Cap**) resulting in higher Reference Tariffs for Customers in FY2022.

With the benefit of hindsight, the approved FY2020 volume forecasts do not reflect prevailing market conditions. Aurizon Network proposes to reduce the FY2020 volume forecasts for the Blackwater and Goonyella systems to better align with YTD performance and expected forecast outcomes.

The proposed amendments to the FY2020 volume forecasts are outlined in Table 1 below.

**Table 1: Proposed FY2020 Volume Forecasts (million tonnes)**

System	UT5 FD	Proposed Forecast	Variance to UT5 FD
Blackwater	68.2	65.4	(2.8)
Goonyella	131.5	126.1	(5.4)
Moura	16.5	16.5	--
Newlands	13.2	13.2	--
GAPE	18.9	18.9	--
<b>TOTAL</b>	<b>248.2</b>	<b>240.0</b>	<b>(8.2)</b>

### 2. Reduce FY2020 Allowable Revenues

To mitigate the pricing impacts of the volume reset on Access Holders and End Users, Aurizon Network proposes to reduce its FY2020 Allowable Revenues to reflect:

- > the reduction in variable maintenance costs attributable to the volume reset;
- > the forecast reduction in electric infrastructure charges (AT5) attributable to lower Transmission Network Service Provider (**TNSP**) costs; and
- > a proposed 'acceleration' of the FY2019 Revenue Cap adjustment, such that it is reflected in Reference Tariffs during FY2020, rather than in FY2021.

The proposed amendments to FY2020 Allowable Revenues are outlined in Table 2 below.

**Table 2: Proposed amendments to FY2020 Allowable Revenues (\$ million)**

System	AT <sub>2-4</sub>	AT <sub>5</sub>
Blackwater	(8.2)	(12.6)
Goonyella	(1.3)	(5.2)
Moura	0.0	--
Newlands	(0.1)	--
GAPE	(0.4)	--
<b>TOTAL</b>	<b>(9.9)</b>	<b>(17.8)</b>

### 3. Other matters

Aurizon Network also proposes several other amendments within this FY2020 Volume Reset DAAU. The following amendments result in overall cost reductions for Access Holders and include:

- > reduction in Electric Energy Charges (**EC**) to reflect the latest cost forecasts for FY2020; and
- > reduction in the QCA Levy to reflect the QCA's latest estimate for FY2020 regulatory fees.

#### Nominal Train Payloads

Aurizon Network also proposes to update the Nominal Train Payload for both the Newlands and Blackwater systems to better reflect the train configurations operating in those systems. While this change will be reflected in Schedule F, it should be noted that this will not impact Aurizon Network's Allowable Revenues. It will, however, impact the distribution of Allowable Revenues between the Reference Tariff components.

#### Effective Date, interaction with the UT5 DAAU and Adjustment Charge

Aurizon Network proposes an effective date for the revised Reference Tariffs of 1 July 2019, however, Aurizon Network recognises the timing of both its revised UT5 Draft Amending Access Undertaking (**UT5 DAAU**), provided to the QCA in September 2019 and this FY2020 Volume Reset DAAU may directly impact upon each other.

Subject to the QCA's approval of one, or both DAAUs, it is expected that those outcomes will be reflected in the ultimate approval of each Amending Access Undertaking and transposed into the operational UT5 Access Undertaking.

In reconciling the financial impacts of the UT5 DAAU and FY2020 Volume Reset DAAU, Aurizon Network proposes to continue billing Access Holders the existing QCA-approved Reference Tariffs for FY2020 until such time as the QCA issues a final approval of the UT5 DAAU. Aurizon Network intends to calculate a single, all-encompassing Adjustment Charge in accordance with Schedule F of the 2017 Access Undertaking.

Table 3 sets out the proposed amendments and their impact to annual revenues over the UT5 Term.

**Table 3. Proposed DAAU variations**

Variation	FY2018	FY2019	FY2020	FY2021
Volume Reset – October 2019			✓	
FY2019 Revenue Cap			✓ ←	✗

Variation	FY2018	FY2019	FY2020	FY2021
Variable Maintenance Costs (AT <sub>1</sub> )			✓	
Electric Infrastructure Charges (AT <sub>5</sub> )			✓	
EC			✓	
QCA Levy			✓	
Nominal Train Payloads			✓	

### Customer Engagement

In preparing this submission, Aurizon Network consulted with the Queensland Resources Council (**QRC**), who in turn consulted with the Rail Working Group (**RWG**) on Aurizon Network's proposal. Aurizon Network understands that a significant number of customers support the approach being proposed in this FY2020 Volume Reset DAAU.

## Background

On 30 November 2016, Aurizon Network submitted UT5 for review, consultation and approval by the QCA. Within that submission, Aurizon Network proposed conservative volume forecasts due to volatility within the coal market at the time of submission. Aurizon Network expected that the QCA would complete its own review of the CQCN volume forecasts for the UT5 Term.

On the 15 December 2017, the QCA published its Draft Decision on Aurizon Network's Draft UT5. Within that Draft Decision, the QCA provided a volume forecast for the UT5 4-year Term which ranged between 236 mt to 264 mt per annum.

Aurizon Network provided updated CQCN volume forecasts based upon more up-to-date information in response to the QCA's Draft Decision on 29 March 2018.

On 21 February 2019, the QCA approved UT5 with a revised volume forecast, again based upon more current information from within the Blackwater system that was only available prior to UT5 approval.

A summary of the UT5 Final Decision CQCN volume forecasts is outlined below in Table 4. For completeness, Aurizon Network has also included actual tonnes billed during the UT5 Term to date, i.e. FY2018 and FY2019.

**Table 4. CQCN Volume Forecasts**

Volume	FY2018	FY2019	FY2020	FY2021
AN's Draft UT5 (Nov 2016)	225.7	228.4	228.4	228.4
QCA Draft Decision (Dec 2017)	236.4	250.2	259.3	264.3
AN's Draft Decision Response (Mar 2018)	231.2	244.2	247.2	248.2
<b>QCA Final Approval (Feb 2019)</b>	<b>231.2</b>	<b>245.2</b>	<b>248.2</b>	<b>249.2</b>
Actual Tonnes	229.6	232.7	N/A	N/A

Table 5 below summarises the financial YTD tonnage for FY2020 compared to the same period last year.

**Table 5. CQCN Volumes Q1 – FY2020 vs FY2019 (million tonnes)**

Month	July (A)	August (A)	September (F)	Total Q1
Tonnes YTD – FY2020	19.7	19.3	19.3 <sup>^</sup>	58.3
Tonnes prior year – FY2019	18.7	19.5	19.6	57.9
Variance (%)	+5.1%	(1.0%)	(1.5%)	+0.7%

<sup>^</sup> September 2019 reflects an extrapolated forecast based on actual net tonnes as at 10 September.

Based on YTD railings and expected forecast outcomes for FY2020, Aurizon Network does not believe that the current FY2020 volume forecast of 248.2 mt will be achieved. Using the latest available information to 10 September (being the volume detail provided to customers), Aurizon Network expects to rail approximately 240.0 mt in FY2020. The forecast volume shortfall is primarily driven by the Blackwater and Goonyella systems and will result in the following outcomes:

- Aurizon Network materially under-recovering its FY2020 Allowable Revenues; and
- FY2020 Revenue Adjustment Amount (**Revenue Cap**) resulting in higher Reference Tariffs for Customers in FY2022.

To address the above outcomes, Aurizon Network proposes to reduce FY2020 volume forecasts for the Blackwater and Goonyella systems.

### Schedule F provisions

The Annual Review of Reference Tariff process (UT5, Schedule F, Clause 4.1) allows for Aurizon Network to annually submit to the QCA for approval, updated CQCN volume forecasts for the purposes of reviewing Reference Tariffs for the forthcoming financial year. The Annual Review of Reference Tariff submission is due to the QCA by 28 February each year.

Due to the uncertainty regarding the approval of UT5, coupled with the timing of the UT5 Final Approval on 21 February 2019, Aurizon Network was unable to submit updated volume forecasts for FY2020 through the Annual Review of Reference Tariff process. Aurizon Network is seeking to do so through this FY2020 Volume Reset DAAU.

At this stage, Aurizon Network does not propose to reset CQCN volume forecasts for FY2021, as provided for in the UT5 Final Decision. A review of FY2021 will be completed in accordance with the approved Schedule F in February 2020.

## FY2020 Volume Reset

The QCA engaged Resource Management International (**RMI**) to advise on the reasonableness of Aurizon Network's coal volume forecasts for the UT5 Term.<sup>1</sup> 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.

The table below 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 UT5.

**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
<b>TOTAL</b>	<b>231.2</b>	<b>245.2</b>	<b>248.2</b>	<b>249.2</b>

Source: Queensland Competition Authority UT5 Final Decision

Based on the financial YTD performance across the CQCN, it is likely that Aurizon Network will rail approximately 240.0 mt in FY2020, 8.2 mt less than the volume forecast of 248.2 mt provided for under the UT5 Final Decision.

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

Aurizon Network has estimated this deficit by calculating the YTD volumes as at 10 September 2019 (as per the information provided to customers) and applying the following formula for the remaining period up until 30 June 2020.

## Forecast methodology

### Step 1: Identify actual tonnes railed YTD

July to September 2019 <sup>^</sup>	58.3 mt
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<sup>^</sup> September 2019 based on an extrapolated forecast using YTD volumes as at 10 September.

### Step 2: Evaluate accuracy of prior year forecasts (Forecast Accuracy)

$\left( \frac{FY18 + FY19 \text{ Actual CQCN Tonnes}}{FY18 + FY19 \text{ UT5 FD Forecast CQCN Tonnes}} \right)$	$\left( \frac{229.5 + 232.7}{231.2 + 245.2} \right) = 97.0\%$
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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 (October 2019 – June 2020)

$\left( \frac{UT5 \text{ FD}}{FY20 \text{ Forecast}} \times \text{Forecast Accuracy} \right) \times \text{Remaining Months}$	$\left( \frac{248.2}{12} \right) \times 97.0\% \times 9 = 180.6 \text{ mt}$
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### Step 4: Combine Step 1 (YTD Actual) + Step 3 (Updated forecast for remaining months)

Modelled CQCN forecast (mt)	238.9 mt
<b>Proposed CQCN forecast (mt)</b>	<b>240.0 mt</b>

The application of this forecasting methodology 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 UT5 Final Decision forecast appears reasonable. For the Moura system as at 10 September 2019, the UT5 Final Decision forecast is likely to be at the high end of the range but appears reasonable.

On this basis, Aurizon Network's proposed FY2020 volume forecast is as follows:

**Table 7: Proposed FY2020 Volume Forecasts (million tonnes)**

System	UT5 FD	Proposed Forecast	Variance to UT5 FD
Blackwater	68.2	65.4	(2.8)
Goonyella	131.5	126.1	(5.4)
Moura	16.5	16.5	--
Newlands	13.2	13.2	--
GAPE	18.9	18.9	--
<b>TOTAL</b>	<b>248.2</b>	<b>240.0</b>	<b>(8.2)</b>

Aurizon Network believes this to be the most appropriate methodology to create a forward-looking forecast for FY2020. This approach is also consistent with the method used for the May



2019 DAAU, which reset FY2019 volumes; the only difference being the inclusion of the 'Forecast Accuracy' measure.

Finally, Aurizon Network reiterates that the current volume forecast for FY2020 of 248.2 mt was initially determined by RMI as of May 2017, before the commencement of the UT5 Term. With the value of hindsight, it is clear this forecast does not reflect prevailing market conditions.

## Impact on FY2020 Allowable Revenue

Aurizon Network acknowledges that a reduction in forecast volumes will have an impact on the Access Charges billed to Access Holders in the affected systems. To mitigate this impact, Aurizon Network proposes adjustments to its FY2020 Allowable Revenues.

### FY2019 Revenue Adjustment Amounts

Aurizon Network engaged with its customers prior to making this submission to seek feedback and support for the FY2020 Volume Reset DAAU. As part of this engagement, customers requested that Aurizon Network consider bringing forward the FY2019 Revenue Cap so that the impact (an overall return to customers) would be incorporated in FY2020 Reference Tariffs instead of FY2021 Reference Tariffs with the objective of mitigating the impact of the volume reset on Access Charges.

Aurizon Network has considered this request from customers and, subject to QCA approval, proposes to bring forward repayment of FY2019 Revenue Cap.

The proposed impact of this adjustment on FY2020 Allowable Revenues is outlined in Table 8 below. Aurizon Network notes that the QCA has not yet published a final decision on the FY2019 Revenue Adjustment Amounts. If the QCA's final decision on the FY2019 Revenue Adjustment Amounts requires any variation to the values outlined in Table 8, Aurizon Network will provide updated Reference Tariffs and Allowable Revenues accordingly.

**Table 8: FY2019 Revenue Adjustment Amounts (\$ million)**

System	AT <sub>2-4</sub>	AT <sub>5</sub>
Blackwater	(8.3)	(2.9)
Goonyella	(1.1)	0.3
Moura	0.0	--
Newlands	(0.1)	--
GAPE	(0.4)	--
<b>TOTAL</b>	<b>(9.9)</b>	<b>(2.7)</b>

### Adjustments for variable maintenance charges

Conditional on the approval of the volume reset, Aurizon Network recognises a corresponding reduction in variable maintenance costs is warranted due to the forecast reduction in volumes traversing the CQCEN. These costs are reflected in the AT<sub>1</sub> Reference Tariff and levied on a gross tonne kilometre (GTK) basis.

On the basis of the proposed October 2019 volume reset forecasts, the impact of this adjustment on FY2020 Allowable Revenues is as follows:

**Table 9: Variable Maintenance Adjustment (\$ million)**

System	AT <sub>2-4</sub>
Blackwater	(0.9)
Goonyella	(1.3)
Moura	--
Newlands	0.0
GAPE	--
<b>TOTAL</b>	<b>(2.1)</b>

### 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.<sup>2</sup> 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.<sup>3</sup>

The latest pricing notifications received from TNSPs suggests that FY2020 connection and transmission charges will be lower than originally forecast in the UT5 Final Decision. It should also be noted that Aurizon Network's updated forecast accounts for the reallocation of variable TNSP costs to the EC Charge, as provided for in the 2019 Electric Traction DAAU, approved by the QCA on 18 July 2019.

The overall impact is a reduction of \$9.7m and \$5.5m in Blackwater and Goonyella respectively. Aurizon Network proposes to pass through these reductions to customers through this FY2020 Volume Reset DAAU.

**Table 10. FY2020 transmission and connection costs (\$m)**

System	UT5 FD	Updated Forecast	Variance to FD
Blackwater	35.2	25.5	(9.7)
Goonyella	36.7	31.2	(5.5)
<b>Total (\$m)</b>	<b>71.9</b>	<b>56.7</b>	<b>(15.1)</b>

### UT5 Adjusted Allowable Revenue

Building on the UT5 Final Decision and accounting for the proposed variations above, Aurizon Network has determined an Adjusted Allowable Revenue (AT<sub>1</sub> – AT<sub>5</sub>) for FY2020 of \$1,040.1m.

**Table 11. FY2020 Non-Electric Allowable Revenue (AT<sub>1</sub>-AT<sub>4</sub>) (\$m)**

Non-Electric Allowable Revenue	FY2020
Approved AT <sub>1</sub> – AT <sub>4</sub> Allowable Revenues	912.6
Impact of Variable Maintenance (AT <sub>1</sub> ) <sup>^</sup>	(2.1)
Impact of FY2019 Revenue Cap	(9.9)

<sup>2</sup> Queensland Competition Authority. Final Decision. Aurizon Network's 2017 draft access undertaking. December 2018.

<sup>3</sup> Ibid.

Non-Electric Allowable Revenue	FY2020
<b>Proposed AT<sub>1</sub> – AT<sub>4</sub> Allowable Revenues</b>	<b>900.6</b>

<sup>^</sup> Due to FY2020 Volume Reset.

**Table 12. FY2020 Electric Allowable Revenue (AT<sub>5</sub>) (\$m)**

Electric Allowable Revenue	FY2020
Approved AT <sub>5</sub> Allowable Revenues	157.4
Electric Transmission & Connection Charges	(15.1)
Impact of FY2019 Revenue Cap	(2.7)
<b>Proposed AT<sub>5</sub> Allowable Revenues</b>	<b>139.5</b>

The proposed Allowable Revenues by individual coal system are provided in Appendix A.

## EC Tariff and QCA Levy Updates

As part of its UT5 Final Decision the QCA approved forecast values of both the EC tariff and QCA Levy for FY2020. These Reference Tariffs were based on forecast financial inputs, which have since been updated to reflect more recent information.

### Electric Energy Charge

The EC tariff relates to the supply of electric energy. The latest pricing notifications and the impact of the volume reset result in FY2020 electric energy charges that are lower than originally forecast in the UT5 Final Decision.

It should also be noted that Aurizon Network's updated forecast accounts for the reallocation of variable TNSP costs to the EC Charge, 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 reallocation of variable TNSP charges on the EC Tariff is outlined in the table below.

**Table 13. FY2020 Electric Energy Charges (\$m)**

	UT5 FD	Cost reductions	Reallocation of variable TNSP cost	Updated Forecast	Variance
Electric Energy	65.1	(12.1)	5.0	58.0	(7.0)

For the purpose of setting a revised EC charge for FY2020, Aurizon Network has taken into consideration the proposed FY2020 volume reset. The resulting EC Charge is as follows:

**Table 14. FY2020 Electric Energy Charges (\$m)**

	Current Approved EC	Proposed EC	Unit
EC Tariff	0.92	0.86	\$/'000 egtk

## QCA Levy

The QCA has provided an updated forecast of its regulatory fees for FY2020. This updated forecast is lower than the amounts assumed in the UT5 Final Decision. Aurizon Network is seeking to update the QCA Levy as part of this DAAU.

For the purpose of setting a revised QCA Levy for FY2020, Aurizon Network has taken the proposed volume reset for FY2020 into consideration.

**Table 15. FY2020 revised QCA Levy**

	Current Approved QCA Levy	Proposed QCA Levy	Unit
QCA Levy	0.02844	0.00998	\$/nt

While the EC Tariff and QCA Levy do not form part of Aurizon Network's Allowable Revenue they are, where relevant, included in the Access Charges billed to Access Holders. Aurizon Network's proposed change will ultimately result in a reduction in Access Charges.

## Changes to Nominal Train Payloads

The FY2020 forecast rollingstock configurations approved by the QCA in the UT5 Final Decision for the Blackwater and Newlands systems were based on data which is now out of date and no longer reflective of the configurations expected to rail during FY2020.

Aurizon Network therefore proposes to update Nominal Train Payloads for the Blackwater and Newlands systems to better reflect the train configurations operating in those systems.

While this change will be reflected in Schedule F, it should be noted that it has no impact on Allowable Revenues. It only impacts the distribution of Allowable Revenues between the Reference Tariff components

The proposed updated payload assumptions are outlined in the table below.

**Table 16. Payload Assumptions (net tonnes per train)**

Consist Type	UT5 FD	Updated Payload
Blackwater – Electric	8,935	8,547
Newlands - Diesel	7,635	6,864

## Effective Date and Adjustment Charges

Aurizon Network proposes an effective date for the revised Reference Tariffs of 1 July 2019. However, Aurizon Network recognises the timing of both its revised UT5 DAAU, provided to the QCA in September 2019, and this FY2020 Volume Reset DAAU may directly impact upon each other. Subject to the QCA's approval of one, or both DAAUs, it is expected that those outcomes will be reflected in the ultimate approval of each Amending Access Undertaking and transposed into a consolidated operational UT5 Access Undertaking.

In reconciling the financial impacts of the UT5 DAAU and FY2020 Volume Reset DAAU, Aurizon Network proposes to continue billing Access Holders using the FY2020 Reference Tariffs that are currently in affect.



Upon receipt of the QCA's final decision on (or any subsequent final approval of) the UT5 DAAU; Aurizon Network will calculate a single, all-encompassing Adjustment Charge, which will see any variance in 'final' FY2020 Reference Tariffs to be recovered from / paid to Access Holders in accordance with Schedule F of the 2017 Access Undertaking.

## Appendix A: Revised FY2020 Reference Tariffs

The following tables outline the adjusted reference tariffs and allowable revenues for FY2020 accounting for the variations contained within this Reference Tariff Variation DAAU as well as the proposed FY2020 volume reset.

**Table 17. UT5 Adjusted Reference Tariffs - FY2020**

Financial Year	AT <sub>1</sub>	AT <sub>2</sub>	AT <sub>3</sub>	AT <sub>4</sub>	AT <sub>5</sub>	EC	QCA Levy
Blackwater	0.95	2,318.56	7.03	2.50	2.91	0.86	0.00998
Goonyella	0.66	1,468.94	4.64	0.95	1.54	0.86	0.00998
Moura	1.77	686.69	7.67	1.25	--	--	0.00998
Newlands	1.84	310.52	3.65	0.46	--	--	0.00998
GAPE	1.48	14,414.93	1.27	1.73	--	--	0.00998

**Table 18. UT5 Adjusted Allowable Revenues (\$m) – FY2020**

Revenue	Allowable Revenue (\$m)	
	AT <sub>2-4</sub>	AT <sub>5</sub>
Tariff		
Blackwater	359.9	78.9
Goonyella	275.0	60.6
Moura	44.7	--
Newlands	13.5	--
GAPE	118.3	--
<b>Total</b>	<b>811.3</b>	<b>139.5</b>

## **Appendix B: Draft Amending Access Undertaking (Clean)**

## Appendix C: Draft Amending Access Undertaking (Mark-Up)