

## QR Network 2011-12 Volume Reset and Annual Variation of Reference Tariffs

### Summary of QR Network's Application and the Authority's Assessment

#### Background

QR Network's 2010 access undertaking provides for QR Network to seek the Authority's approval to adjust its reference tariffs prior to the beginning of each financial year. This adjustment is based on:

- (a) updating forecasts of volumes – i.e. net tonnes (nt) and gross tonne kilometres (gtk);
- (b) updating inflation forecasts with actual inflation estimates, for both the Consumer Price Index (CPI) and Maintenance Cost Index (MCI); and
- (c) adjusting system allowable revenues for any under- or over-recovery of the revenue cap in the previous financial year.

The 2010 access undertaking also allows QR Network to update the forecast system allowable revenues, and reference tariffs, for each coal system in subsequent years to reflect the actual change in the MCI and CPI (less the approved x-factor). This ensures that the operating and maintenance costs are constantly updated as escalation measures are known so that in subsequent years of the regulatory period, the cumulative effect of differences between the forecast and actual MCI and CPI will be less pronounced.

Tariffs in the approved 2010 access undertaking were based on a *forecast* of the 2008-09 capital expenditure and therefore *forecasts* of the capital expenditure carry-over account balance and opening asset value as at 1 June 2009.

As the 2008-09 capital expenditure has now been approved, the 2010 undertaking also provides for reference tariffs to be adjusted based on the *actual* capital expenditure carry-over account balance and opening asset value as at 1 June 2009.

#### *Public Consultation*

QR Network is required to submit the annual variation of reference tariffs by 28 February each year. In accordance with extensions granted by the Authority, QR Network lodged its application for the Authority's approval on 11 April 2011 (April submission).

The Authority published QR Network's proposal and received submissions from Asciano and the Queensland Resources Council (QRC). Stakeholders were concerned about the reasonableness of QR Network's volume assumptions, in particular the potential imbalance in the forecast volumes handled by standard diesel and electric trains. QRC also raised concerns about QR Network's proposal to use this mechanism to adjust tariffs to recoup an anticipated under-recovery of AT<sub>1</sub> (incremental maintenance cost) revenues. Both Asciano and the QRC commented on a lack of published materials in support of QR Network's application.

QR Network subsequently lodged a supplementary application on 18 May 2011 (May submission) to amend aspects of its 2011-12 review, namely:

- (a) to further revise downwards the forecast volumes for 2010-11; and
- (b) to submit two tariff change proposals, with the Authority to approve one of either:
  - (i) tariffs based on the lower volumes and with the AT<sub>1</sub> revenue adjustments; or

- (ii) tariffs based on the lower volumes but without the AT<sub>1</sub> revenue adjustments.

In line with the undertaking's requirements, QR Network has provided details on the methods, data and assumptions used to determine the proposed variations and reference tariffs. QR Network's submission also summarises its modelling results and included, on a confidential basis, copies of its financial models.

#### *Assessment Criteria*

QR Network's 2010 access undertaking states that the Authority will approve QR Network's annual review of reference tariffs if it is satisfied that QR Network's proposal has been calculated in accordance with the necessary undertaking provisions, namely that:

- (a) for volumes – the revised volume forecasts are reasonable and the consequential adjustments to the system allowable revenues and tariffs are calculated properly;
- (b) for revenue cap related amendments:
  - (i) the revenue cap under- or over-recoveries approved by the Authority have been escalated to account for the time lag in the adjustment to reference tariffs; and
  - (ii) the revenue caps for all subsequent years are adjusted to reflect the actual change in the MCI and CPI less the approved x-factor used in the calculation of the approved revenue cap adjustment.

The Authority's assessment has also sought to ensure that QR Network has accurately adjusted tariffs for the impact of the recalculation of the capital carry-over account and the opening asset value based on the actual 2008-09 capital expenditure.

Consequently, this paper focuses on:

- (a) ensuring that QR Network has accurately:
  - (i) estimated the capital expenditure carry-over account balance as at 1 July 2009;
  - (ii) estimated the opening asset value as at 1 July 2009;
  - (iii) escalated maintenance and operating costs in 2011-12 and 2012-13; and
  - (iv) escalated the 2009-10 revenue cap adjustments;
- (b) assessing the reasonableness of QR Network's revised volumes; and
- (c) ensuring that QR Network has accurately revised system allowable revenues and the resulting reference tariffs based on the aforementioned changes to the input estimates.

### **Assessment of QR Network's Proposed Changes to the Cost Components**

#### *Capital Revenue Carry-over Amount and Finalised Opening Asset Values*

At the time the 2010 undertaking was submitted, the Authority had approved the 2008-09 capital expenditure but there had been insufficient time available to have this actual capital expenditure number

fully incorporated into the tariffs. In particular, the tariffs in the 2010 undertaking were not based on finalised estimates of:

- (a) the opening asset value as at 1 July 2009; and
- (b) the balance of the capital carry-over account – the mechanism included in the 2006 undertaking to allow future tariffs to be adjusted for any over- or under-spending of capital expenditure over the term of that undertaking.

While the amount of the forecast and the approved capital expenditure for 2008-09 was identical (i.e. \$365.1 million), there were some differences in the composition of that capital expenditure and between the forecast and actual asset lives. This has resulted in some small variations between the forecast and actual opening asset value and carryover account balance.

The balance in the capital carry-over account used in determining the reference tariffs in the 2010 undertaking was \$5.25 million. QR Network has submitted a revised capital expenditure carry-over account balance of \$4.47 million (see **Table 1** for more details).

Stakeholders did not comment on this aspect of QR Network's application.

The Authority has reviewed QR Network's application and has confirmed that QR Network has relied on the approved capital expenditure and asset lives in determining the finalised balance in the carryover account.

**Table 1: Finalised Carryover Account 2005-06 to 2008-09 (\$m)**

<i>System</i>	<i>Forecast Carry-over Account</i>	<i>Finalised Carry-over Account</i>
Blackwater		
<i>Non-electric</i>	9.94	10.10
<i>Electric</i>	-1.49	-1.57
Goonyella		
<i>Non-electric</i>	8.69	7.47
<i>Electric</i>	-1.74	-1.45
Vermont		
<i>Non-electric</i>	0.16	0.20
<i>Electric</i>	0.55	0.53
Moura	-6.14	-6.08
Newlands	-4.73	-4.74
<b>Total</b>	<b>5.25</b>	<b>4.47</b>

QR Network has also proposed a revised opening asset value of \$3.247 billion, which is slightly lower (i.e. \$55,000) than the forecast value used to determine the tariffs in the 2010 undertaking.

The Authority has reviewed QR Network's application and has confirmed that QR Network has relied upon the approved capital expenditure and asset lives in determining the opening asset value as at 1 July 2009 (see **Table 2** for details).

**Table 2: Asset Base roll-forward for 2008-09 and opening asset value as at 1 July 2009 (\$'000m)**

	<i>Goonyella</i>	<i>Vermont</i>	<i>Blackwater</i>	<i>Minerva</i>	<i>Rolleston</i>	<i>Moura</i>	<i>Newlands</i>	<i>Total</i>
<b>Non-electric</b>								
Opening	1,006,323	46,139	920,902	76,397	249,158	257,100	167,590	<b>2,723,609</b>
Capex	97,531	-	132,068	4	-	1,205	1,936	<b>232,745</b>
Plus inflation	21,297	463	19,920	1,543	5,031	5,203	3,403	<b>56,859</b>
less depreciation	41,871	1,165	38,686	2,956	11,419	8,605	6,895	<b>111,598</b>
Closing	1,083,281	45,438	1,034,204	74,988	242,769	254,902	166,035	<b>2,901,616</b>
<b>Electric</b>								
Opening	144,746	8,998	137,613					<b>291,358</b>
Capex	64,932	-	13,249					<b>78,182</b>
Plus inflation	3,575	90	2,911					<b>6,577</b>
less depreciation	13,465	227	7,483					<b>21,175</b>
Closing	199,788	8,862	146,291					<b>354,941</b>
<b>Total (Electric and Non-electric)</b>								
Opening								<b>3,014,967</b>
Capex								<b>310,927<sup>a</sup></b>
Plus inflation								<b>63,436</b>
less depreciation								<b>132,773</b>
Closing Asset Value								<b>3,256,557</b>
								<b>3,256,557</b>
<b>UT3 Opening Asset Value</b>								
<i>Removal of System-wide Assets</i>								<i>(9,485)</i>
<b>CQCR Opening Asset Value as at 1 July 2009</b>								<b>3,247,072<sup>b</sup></b>

<sup>a</sup> The Authority approved \$366 million of capital expenditure in 2008-09, which includes the \$311 million reported plus around \$55 million for Vermont related infrastructure, which is separately recorded as an opening asset value for roll-forward purposes as Vermont has its own reference tariff (Authority's October 2009 decision on the Vermont reference tariff).

<sup>b</sup> There is a very minor difference of \$55,000 between the forecast opening asset value used for determining the reference tariff in the 2010 undertakings and that reported above (i.e. \$3,247.072 million - \$3,24.127 million = \$0.055 million). This is a result of QR Network removing a greater amount of system-wide assets in its actual roll-forward than it previously anticipated.

### *Escalated Maintenance & Operating Costs*

The 2010 undertaking requires QR Network to update the system allowable revenues to reflect changes between the forecast and actual CPI and MCI (less approved x-factors). Specifically, QR Network has proposed to increase system allowable revenues in 2011-12 and 2012-13 to take account of a higher:

- (a) operating cost allowance in 2011-12 and 2012-13 in line with a higher than forecast CPI; and
- (b) maintenance cost allowance in 2011-12 and 2012-13 in line with a higher than forecast MCI.

#### Operating Costs

Based on a change in the CPI in 2009-10 that was higher than the forecast (see **Table 3**), QR Network has proposed to increase the operating cost estimates by:

- (a) \$0.40 million in 2011-12 (i.e. from \$55.95 million to \$56.36 million); and
- (b) \$0.49 million in 2012-13 (i.e. from \$56.93 million to \$57.41 million).

**Table 3: 2009-10 Forecast vs Actual CPI**

<i>CPI Measure</i>	<i>2009-10 Forecast</i>	<i>2009-10 Actual</i>
CPI	2.50%	3.20%
CPI-X	1.88%	2.40%

The Authority has assessed QR Network's revised operating cost estimates and has confirmed that QR Network has used the appropriate CPI estimates to accurately adjust its operating cost allowance.

#### Maintenance Costs

Based on a change in the MCI in 2009-10 that was higher than the forecast (see **Table 4**), QR Network has proposed to increase the maintenance cost estimates by:

- (a) \$1.87 million in 2011-12 (i.e. from \$173.04 million to \$174.92 million); and
- (b) \$1.95 million in 2012-13 (i.e. from \$180.39 million to \$182.35 million).

**Table 4: Change in MCI Index**

<i>Index Components</i>	<i>Weightings</i>	<i>2009-10 Forecast</i>	<i>2009-10 Actual</i>
Fuel	3.2%	98.6	96.5
Accommodation	1.5%	95.2	113.1
Consumables	34.9%	99.7	101.8
Labour	44.5%	116.8	118.1
Assets	15.9%	101.2	101.2
Weighted Index	100%	107.5	109.0
MCI		7.45%	8.97%
MCI-X		5.59%	6.73%

The Authority has assessed the indices used in QR Network's adjustments using relevant publicly available data (ABS and Australian Automobile Association (for fuel)) against the Authority's approved maintenance allowance schedule and found that QR Network has accurately adjusted its maintenance cost allowances.

#### *System Allowable Revenues*

In its April submission, QR Network proposed to increase its system allowable revenues for 2011-12 for:

- (a) a roll-forward of the revenue cap adjustment from 2009-10; and

- (b) an anticipated under-recovery of revenues in 2011-12 from the AT<sub>1</sub> tariff component due to a lower volume forecast (i.e. gtps) for that year.

In commenting on the April submission, the QRC argued that the inclusion of the additional AT<sub>1</sub> revenues was inconsistent with the terms of the 2010 undertaking. In response to these objections, QR Network made a revised submission in May 2011 that included two tariff proposals for 2011-12, namely revised tariffs based on either:

- (a) *option 1* – lower volumes and a revenue cap adjustment that included an up-lift to compensate for the anticipated lower AT<sub>1</sub> revenues; or
- (b) *option 2* – lower volumes but without the AT<sub>1</sub> revenue adjustment.

The Authority's consideration of the AT<sub>1</sub> revenues matter is set out below.

In terms of the roll-forward of the 2009-10 revenue cap adjustment, the Authority has established that QR Network has used the approved revenue cap adjustment (i.e. an under-recovery of \$0.15 million), rolled this forward at the approved weighted average cost of capital (WACC), i.e. 9.96%, and has accurately calculated the adjustment to the system allowable revenues for 2011-12 (i.e. an additional \$0.18 million).

#### Treatment of AT<sub>1</sub> Revenues

Part B of Schedule F of the 2010 undertaking sets out the process to be followed in conducting the annual review of reference tariffs.

The system forecast (i.e. volume estimates) for each coal system is first revised to account for the latest volume forecasts. System allowable revenue for each coal system is then adjusted to account for changes in the CPI and MCI, over- or under-recovery of revenue for the previous year and, for the first year only, the difference between the actual and forecast capital expenditure carry-over and opening asset value. System allowable revenue is defined as comprising the relevant AT<sub>2-4</sub> and AT<sub>5</sub> (fixed) tariff components and does not include the AT<sub>1</sub> (variable) component.

QR Network's April submission proposed to apply its revised system forecast to system allowable revenue for each system, and to adjust system allowable revenue for changes in CPI and MCI, over- or under-recovery of revenue and capital expenditure carry-over differences, as provided for in the undertaking.

In addition, QR Network proposed to shift revenue from the variable AT<sub>1</sub> tariff component to the remaining components covered by the revenue cap. The amount that QR Network proposed to shift was related to the shortfall in revenue that QR Network anticipated as a result of the lower volume forecasts.

The QRC was particularly concerned about this aspect of QR Network's April submission. Specifically, the QRC said that shifting revenues from the AT<sub>1</sub> reference tariff (which accounts for incremental maintenance costs and is intended to be variable) to the AT<sub>2-4</sub> reference tariffs (which are based on the approved fixed revenue caps – i.e. the system allowable revenue) is inconsistent with the provisions of the 2010 undertaking. The QRC calculated that, on the basis of the April submission, this proposal would increase system allowable revenue (fixed revenue) by around \$2.6 million in 2011-12, revenue which would otherwise be expected to be variable and fluctuate according to variations in incremental maintenance costs based on actual railings.

In its May submission, QR Network maintained its view that its proposed treatment of the AT<sub>1</sub> revenues was consistent with the 2010 undertaking. QR Network's key argument was that it is reasonable to determine system allowable revenue, which is used to calculate reference tariffs, by deducting revenue expected to be recovered via the AT<sub>1</sub> component and to vary this component to account for differences between the revised system forecast and the current system forecast.

The Authority's view is that this interpretation is not consistent with the relevant provision of the 2010 undertaking (clause 3.1.2(c) of Part B of Schedule F). The Authority considers that the 2010 undertaking is clear in requiring reference tariffs to be calculated by applying the revised system forecast to the revised system allowable revenue, with the revised system allowable revenue being determined in accordance with the definition in the undertaking (which clearly does not include taking into account AT<sub>1</sub> revenues).

This view is also supported by consideration of the context and purpose of the annual review of reference tariffs. Provision for the annual review was inserted into QR Network's 2010 undertaking with the intention of reducing the size of variations caused by revenue cap adjustments (which themselves do not take into account the AT<sub>1</sub> tariff component). QR Network's proposal would mean that the annual review would have a different scope to the revenue cap adjustments, which appears inconsistent with the intent of the undertaking.

In addition, the AT<sub>1</sub> component is meant to vary with volumes and the recovery of any shortfall from the initial estimate as a result of volume shortfalls is not appropriate.

As a consequence, the Authority has determined that QR Network's original proposed treatment of the AT<sub>1</sub> tariff component does not comply with the requirement in the undertaking for the system allowable revenue and reference tariffs to be calculated properly.

The Authority, therefore, rejects option 1 and instead accepts option 2, as set out in QR Network's May submission.

#### *Other Matters*

QR Network included a range of sundry other matters in its submission, namely adjustments to account for changes in electricity network connection costs, common cost contributions for certain loading points and the split between diesel and electric trains.

#### Electricity Network Connection Costs

QR Network's electricity connection costs relate to the amount of electric assets connected to the distribution network. These costs are included in the allowance for operating the overhead electric infrastructure on the Goonyella and Blackwater systems and are derived based on the forecast electric gross tonne kilometres (egtk) in those systems and are recovered through the AT<sub>5</sub> tariff component.

As QR Network has revised its egtk forecasts down, it has also revised its connection costs down to align with the new lower volume forecasts – i.e. QR Network has proposed to reduce its forecast connection costs by around \$0.5 million in both 2011-12 and 2012-13.

The Authority has reviewed QR Network's claim and has confirmed that its revised network connection costs are reasonable as they are based on the original cost assumptions but adjusted for the revised volume estimates.

### Common Cost Contributions

The majority of the tariffs for loading points are levied on the basis of system reference tariffs. However, a number of loading points would not meet their spur costs plus the minimum contribution to the system's common costs on the basis of the system reference tariff. These loading points have their own reference tariff (i.e. Minerva, Rolleston and Vermont) based on their incremental costs plus the minimum contribution to the common costs of the remainder of the network. The amount of the common cost contributions is set out in the undertaking and is based on the system tariffs and distance travelled.

As the revised volumes have changed the Blackwater and Goonyella system reference tariffs, QR Network has consequently revised the common costs contribution for the affected mines. While this is largely a tariff, not revenue cap, issue, the Vermont train service travels through both the Goonyella and Blackwater systems, which has an impact on its contribution to the allowable revenues in both systems – i.e. it contributes around \$0.87 million less to Blackwater but around \$0.88 million more to Goonyella.

The Authority has reviewed QR Network's revised assessments of the common cost contributions and considers that they are reasonable as they are based on the correct formula, the revised Goonyella and Blackwater reference tariffs and the revised volumes.

### Diesel/Electric Forecast

For the purposes of determining the AT<sub>5</sub> electric infrastructure tariff for the Blackwater and Goonyella systems, QR Network must make an estimate of the proportion of coal that will be transported by diesel and electric locomotives.

The April submission indicates that the forecast diesel/electric split for Blackwater is based on:

- (a) 0% utilisation of electric consists on the non-electrified Rolleston and Minerva branch lines; and
- (b) an assessment that the electric infrastructure on the Blackwater mainline has the ability to handle up to 60% of the forecast tonnages for the remaining loading points. QR Network's forecast diesel/electric split assumes that this target will be reached and this, in turn, is based on the assumption that there will be the full deployment of 14 electric trains on the Blackwater system.

QR Network said that these assumptions were reasonable, but also acknowledged that this level of utilisation has not been achieved in recent years. QR Network said that past under-utilisation was due to a number of issues affecting electric fleet deployment, including:

- (a) limitations to two electric consists per track section prior to completion of new Blackwater feeder stations being developed at Raglan, Bluff, Duaringa and Wycarbah; and
- (b) unreliability of train ordering by mines resulting in diesel hauled services being re-directed to mines normally serviced by electric services.

QR Network said that it expected that the first of these issues would be solved by the connection of the new Blackwater feeder stations.

However, the QRC was concerned that the assumption of 100% utilisation of electric consists on the Blackwater system is unrealistic, which would reduce the level of the AT<sub>5</sub> reference tariff and may send misleading pricing information to access seekers. The QRC further argued that, as coal producers use

reference tariffs as a means of informing investment decisions, having a Blackwater system AT<sub>5</sub> tariff based on unrealistic forecasts may lead to inefficient investment decisions.

The Authority accepts that reference tariffs are an important source of information for informing investment decisions, and it is in turn important, that they are based on realistic assumptions relating to forecasts, including forecasts of the diesel/electric split for the Blackwater system.

However, the Authority also accepts that forecasting the utilisation of the Blackwater electric infrastructure, and therefore the pricing of that infrastructure as well, has been particularly problematic for QR Network. Indeed, the reason for the very significant increase in the Blackwater AT<sub>5</sub> tariff for 2011-12 is almost entirely due to the underutilisation of that infrastructure in 2009-10, which led to a significant under-recovery of the Blackwater AT<sub>5</sub> revenue cap in that year. This price rise would only have been exacerbated if QR Network had adopted an utilisation assumption for 2011-12 that was more reflective of past utilisation levels.

The Authority accepts QR Network's arguments that the additional feeder stations may have a positive impact on the utilisation of the Blackwater infrastructure, but realistically this will not occur during 2011-12 as those feeder stations are not anticipated to be commissioned until later in 2012.

It is apparent, therefore, that the utilisation assumptions for the Blackwater electric infrastructure are likely to remain an issue for some time yet. However, the Authority is not prepared to reject this reference tariff application on the basis of that utilisation assumption alone. In particular, the Authority has noted that the assumption is one that has been made by QR Network, but it is not to its immediate commercial advantage as it will tend limit the size of increase in the Blackwater AT<sub>5</sub> tariff in 2011-12. Ultimately, any under-recovery of revenue will be recouped through the revenue capping mechanism.

This is, nevertheless, a matter that will be the focus of continuing review as part of future tariff reviews.

#### *Revised Volumes*

QR Network's 2010 undertaking included forecasts for coal tonnages to increase from 184.7 mt in 2009-10 to 223.5 mt for both of 2011-12 and 2012-13.

QR Network's April submission proposed a volume forecast of 209.9 mt for 2011-12 – i.e. around 6% below the 2010 undertaking's forecast for 2011-12 and equal to the undertaking's forecast for 2010-11.

In May 2011, QR Network sought to further revise downwards its volume forecasts for 2011-12 to 202.0 mt – i.e. around 10% below the forecasts in the 2010 undertaking (see **Table 5** for details).

**Table 5: Comparison of Volumes Forecasts for 2011-12 (mt)**

<i>System</i>	<i>2010 Undertaking</i>	<i>April 2011 Submission</i>	<i>May 2011 Submission</i>	<i>Variance / %<sup>a</sup></i>
Blackwater	64.6	63.6	61.0	-6%
Goonyella	124.9	115.8	110.5	-12%
Moura	16.4	13.0	13.0	-21%
Newlands	17.5	17.5	17.5	0
<b>Total</b>	<b>223.5</b>	<b>209.9</b>	<b>202.0</b>	<b>-10%</b>

QR Network said in its May submission that the revised volume forecast resulted from the continuing uncertainty regarding a number of recent events, including the coal availability due to remnant flooding issues from rain earlier in the year and offshore events which have dampened the demand for central Queensland coal.

QR Network said that it was difficult to finalise its volume estimates due to uncertainty, particularly the flood recovery rates and the high degree of information asymmetry between QR Network and coal producers.

Asciano and the QRC both said that QR Network had not made a compelling case for the accuracy of the volume forecasts included in both its April and May submissions. However, they both acknowledged that the factors identified by QR Network would have a dampening impact on coal exports from central Queensland.

The Authority accepts that QR Network's revised forecast is at the low end of the range anticipated at the time it submitted its 2010 undertaking. The Authority also accepts that there is continuing uncertainty about coal production levels brought on by flood events earlier this year. Indeed, even though stakeholders were concerned about the level of QR Network's revised forecasts, none provided an alternative forecast, or expressed any contrary views for the reasons behind the lower than expected volumes. The Authority also notes that, while these forecasts will affect the timing of QR Network's revenue stream, it will not ultimately affect the net present value of those revenues given the role of the revenue capping mechanism.

Accordingly, the Authority considers QR Network's revised volume forecast to be reasonable given the information currently available – see **Table 9** for the approved volume forecasts by month.

### **Assessment of the Revised System Allowable Revenues and Reference Tariffs**

As set out above, the Authority has reviewed the various inputs into QR Network's proposed 2011-12 volume reset and variation of reference tariffs application. The Authority has accepted all of QR Network's proposed input assumptions with the exception of QR Network's option 1, which sought to compensate for an anticipated shortfall in AT<sub>1</sub> revenues which the Authority has rejected.

The Authority has also reviewed, and has confirmed that, QR Network has accurately converted these input assumptions into revised system allowable revenues for 2011-12 and 2012-13, and for revised reference tariffs for 2011-12 (see **Tables 6** and **7** for details).

**Table 6: System Allowable Revenue for 2011-12 and 2012-13 (\$m)\***

<i>System</i>	<i>Original 2011-12</i>	<i>Revised 2011-12</i>	<i>Original 2012-13</i>	<i>Revised 2012-13</i>
Blackwater				
<i>Non-electric</i>	236.0	235.8	236.2	236.1
<i>Electric</i>	74.9	74.4	83.0	82.4
Goonyella				
<i>Non-electric</i>	254.8	253.7	266.5	265.4
<i>Electric</i>	76.0	77.5	80.6	82.1
Moura	39.7	40.0	43.1	43.5
Newlands	24.9	25.2	31.0	31.3
<b>Total Non-electric</b>	<b>555.3</b>	<b>554.7</b>	<b>576.9</b>	<b>576.2</b>
<b>Total Electric</b>	<b>150.9</b>	<b>151.9</b>	<b>163.6</b>	<b>164.6</b>
<b>Grand Total</b>	<b>706.2</b>	<b>706.6</b>	<b>740.5</b>	<b>740.8</b>

\*revenue caps for 2011-12 incl. the revenue cap adjustment carried forward from 2009-10.

**Table 7: Reference Tariffs for 2011-12**

<i>System</i>	<i>AT<sub>1</sub></i>	<i>AT<sub>2</sub></i>	<i>AT<sub>3</sub>*</i>	<i>AT<sub>4</sub>*</i>	<i>AT<sub>5</sub></i>	<i>EC</i>
Blackwater	0.82	1,922.06	4.64	1.57	5.13	0.80
Goonyella	0.57	1,217.73	4.69	1.01	2.10	0.80
Moura	1.52	575.73	11.08	1.38	-	-
Newlands	1.59	257.42	4.73	0.67	-	-
Vermont	0.76	3,139.80	4.87	1.55	4.45	0.80
GVG	0.58	1,217.73	4.70	1.50	2.27	0.80
<b>Discounts / Premiums</b>						
Stanwell			(1.58)			
Rolleston			3.64			
Minerva			1.87			

\*AT<sub>3</sub> and AT<sub>4</sub> tariff components include the revenue cap adjustment carried forward from 2009-10 (QR Network: 18).

As a result of these changes, reference tariffs in central Queensland will be around 10% higher in 2011-12 than originally estimated. The main driver of these higher tariffs is the anticipated lower volumes as a result of remnant mine flooding issues.

While other factors (e.g. past under-recovery of revenues and higher than anticipated cost pressures) have also contributed to the tariff increases, they have been relatively minor (i.e. around one half of one percent) in comparison to the volume forecasts that are around 10% lower. This is reflected in

relatively modest increases in system allowable revenues. It is also relevant to note that the effect of these factors has tended to differ between the various tariff components and rail systems across central Queensland (see **Table 8** for a decomposition of the impact of the various changes on the central Queensland coal reference tariffs). For instance, the increase in Blackwater AT<sub>5</sub> (electric infrastructure tariff) was overwhelmingly due to the recoupment of the under-recovery of revenue in 2009-10 rather than lower volume forecasts for 2011-12.

**Table 8: Decomposition of the proposed tariff change for 2011-12 (\$/nt)**

	<i>Original \$/tonnes</i>	<i>CCA and OAV</i>	<i>MCI and CPI</i>	<i>Connection Costs, Consist and Common Cost</i>	<i>Sum of Non- Rev Cap Adjustments</i>	<i>Revenue Cap Adjustment</i>	<i>Total \$/tonnes (per original approved vol forecasts)</i>	<i>Proposed \$/tonnes (total adjusted rev caps per new vol forecasts)</i>	<i>variance between approved rev caps and proposed rev caps (old volumes)</i>	<i>variance between original \$/tonnes and proposed \$/tonnes)</i>	<i>increase attributed to volume change</i>
AT <sub>2-4</sub> (\$/nt)											
Blackwater	3.568	-0.002	0.013	-0.013	-0.002	0.084	3.650	3.865	2%	8%	6%
Goonyella	2.081	-0.024	0.008	0.007	-0.009	-0.042	2.031	2.296	-2%	10%	13%
Moura	2.546	0.009	0.011		0.020	-0.134	2.432	3.076	-4%	21%	26%
Newlands	1.730	0.006	0.009		0.016	-0.308	1.438	1.438	-17%	-17%	0%
<b>Overall</b>	<b>2.518</b>	<b>-0.013</b>	<b>0.010</b>	<b>0.0002</b>	<b>-0.003</b>	<b>-0.033</b>	<b>2.482</b>	<b>2.746</b>	<b>-1%</b>	<b>9%</b>	<b>11%</b>
AT <sub>5</sub> (\$/egtk)											
Blackwater	4.423	-0.031	0.003	-0.003	-0.031	0.664	5.056	5.128	14%	16%	1%
Goonyella	1.907	0.047	0.002	-0.012	0.036	-0.062	1.881	2.098	-1%	10%	12%
<b>Overall</b>	<b>2.569</b>	<b>0.026</b>	<b>0.002</b>	<b>-0.009</b>	<b>0.019</b>	<b>0.129</b>	<b>2.717</b>	<b>2.953</b>	<b>6%</b>	<b>15%</b>	<b>9%</b>

**Table 9: Revised Monthly System Forecasts 2011-12**

<i>Monthly System GtK ('000 gik)</i>	<i>Blackwater</i>	<i>Goonyella</i>	<i>Moura</i>	<i>Newlands</i>
July 2011	2,893,417	3,237,168	238,441	363,530
August 2011	2,957,177	3,167,291	223,681	358,827
September 2011	2,768,774	3,088,290	221,591	340,510
October 2011	2,843,088	3,182,778	225,600	300,176
November 2011	2,709,447	3,075,639	217,796	326,690
December 2011	2,795,361	3,052,651	204,803	325,984
January 2012	2,834,517	3,109,470	224,464	325,740
February 2012	2,461,350	2,602,267	221,713	234,571
March 2012	2,856,130	2,837,526	243,276	319,199
April 2012	2,897,179	3,212,722	238,290	348,417
May 2012	3,035,275	3,305,301	240,612	371,787
June 2012	3,075,929	3,244,751	234,774	333,248