

QR Network's 2010 Draft Access Undertaking

*Volume 1- Policy
issues*

14 April 2010

TABLE OF CONTENTS

Executive summary	4
Introduction to qr Network’s submission	8
1 New issues raised in this undertaking	13
1.1 Introduction	13
1.2 Transitional Provisions	13
1.3 Anti-discrimination provision.....	15
1.4 Adjustment charge process	16
1.5 Standard Access Agreements	19
1.5.1 Consequential Loss.....	19
1.5.2 Public Liability insurance coverage	20
1.5.3 Security Arrangements.....	20
1.6 Supply Chain Principles	23
1.6.1 Changes from LTS finalisation	23
1.6.2 Supply Chain Assumptions	24
1.6.3 Supply Chain Master Planning	24
1.6.4 Contracting for capacity in coal supply chains	25
1.6.5 Transfer of customer information.....	25
1.6.6 No Fetter.....	26
1.7 Performance Reporting Requirements	26
1.7.1 New reporting inclusions	27
1.8 Audit Processes	28
1.9 Capacity Expansion And Investment Framework	29
1.9.1 Introduction	29
1.9.2 Underlying Principles of Capacity Expansion and Infrastructure Enhancement Framework.....	32
1.9.3 Extensions	33
1.9.4 Incremental Infrastructure Enhancements.....	34
1.9.5 Significant Infrastructure Enhancements	34
1.9.6 User Funding Agreements	36
1.9.7 Conclusion	40
2 Material from QCA draft decision that QR Network does not accept or represents a material difference to the 2009 Dau	41
2.1 Introduction	41
2.2 Requirement to provide Audited General Purpose Financial Statements	41
2.3 System Rules	42
2.4 Decision Making Audit Process	43
2.5 Definition of reduction factor.....	44
2.6 Capacity Notification Register	45
2.7 Review of Rail Infrastructure	46
2.8 Incentive Mechanism	47
2.8.1 Revenue Cap Adjustment Provisions	47
2.8.2 Transmission Network Charge Wash-up	49
3 Draft decisions accepted by QR Network	52
4 Reference Tariffs.....	57
4.1 Introduction	57
4.2 QCA Draft Decisions that QR Network does not accept	57
4.3 Reference Tariff components and calculation – Central Queensland coal region	58
4.3.1 Weighted Average Cost of Capital	58
4.3.2 Market Averaging Period.....	59
4.3.3 Risk Free Rate	60

4.3.4	Cost of Debt	61
4.3.5	Asset Beta / Equity Beta.....	63
4.3.6	Cost of Capital	67
4.3.7	Volume Forecasts	68
4.3.8	Capital Indicator	69
4.3.9	Capital Carry-over amount	73
4.3.10	Opening Asset Value	77
4.3.11	Operating Costs	79
4.3.12	Transmission and Connection Costs.....	80
4.3.13	Forecast Transmission Charges.....	82
4.3.14	Maintenance Costs	85
4.3.15	Maintenance Cost Index.....	95
4.3.16	Maintenance Cost Summary	96
4.3.17	Reference Tariffs.....	99
4.4	Central Queensland Coal Region.....	99
4.5	Western system	104
4.5.1	Background.....	104
4.5.2	Ceiling Price Methodology.....	105
4.5.3	Capital expenditure	105
4.5.4	Opening Asset Value	107
4.5.5	Cost of Capital	108
4.5.6	CPI and Depreciation	108
4.5.7	Operating Costs (OPEX)	108
4.5.8	Maintenance	110
4.5.9	Volume Forecast.....	111
4.5.10	Maximum Allowable Revenues	112
4.5.11	Ceiling Price.....	113
4.5.12	Adjusted Ceiling Price (with deferred depreciation)	114
4.5.13	Proposed Reference Tariff	115

EXECUTIVE SUMMARY

This is Volume 1 of QR Network's 2009 Draft Access Undertaking (2010 DAU).

The lodgement of this document represents a formal withdrawal of the previous draft 2009 Access Undertaking submitted in September 2008.

QR Network accepts the great majority of the QCA's draft decision and will not oppose the application of these areas of agreement. In some cases we accept the principle of the QCA's decision and have discussed this with the QCA in the period since the issue of its draft decision in order to arrive at an acceptable outcome for QR Network and the QCA. We believe we have done this on a large number of issues. There are a very small number of decisions QR Network does not agree with because they impact its commercial objectives. Extensive reasoning is provided within this submission in response to these matters.

Since the submission of the draft 2009 Access Undertaking with the QCA in September 2008, the Queensland Government has announced its intention to horizontally separate and privatise the Central Queensland Coal Region from the Queensland narrow gauge rail network. As a result, a number of new processes have been included in this 2010 DAU to address stakeholder and industry concerns about the incentives of a vertically integrated private below rail service provider. However, QR Network considers that the concerns regarding these incentives should be appropriately balanced with other aspects of the regulatory regime, including volume incentive frameworks.

Further, industry has advanced the negotiation of supply chain integration as a result of the Dalrymple Bay Coal Chain (DBCC) Long Term Solution discussions. QR Network has been part of these discussions and has sought to include a number of the principles flowing from these discussions within its Undertaking. These are not limited only to DBCC and have been kept at a level that enables the application to all coal supply chains.

QR has consulted with industry on the issues that it communicated through the QCA draft decision consultation process; and this has resulted in a review of capacity expansion. The framework for capacity enhancements is a major concern of stakeholders raised in responses to the draft decision. QR Network has developed drafting to address this broad issue in Clause 7.5 of the 2010DAU. These provisions

were developed over a relatively short timeframe with some, but limited, consultation with the QCA and stakeholders. Our intention is to propose principles which we believe provide a workable framework addressing the various concerns and interests of the QCA and stakeholders together with the objectives and obligations in both the state and national access regimes.

The reporting and auditing processes have been extended to provide increased transparency and confidence regarding QR Network's performance in providing access to the declared service in a fair and non-discriminate manner. These include:

- Disaggregation of the quarterly performance and annual reports between related parties and third party operators;
- Obligations to inform affected access seekers of access holders of a breach of the Undertaking;
- Extending the audit requirements to all reports produced under the Access Undertaking; and
- Restrictions on appointment of auditors including the option to appoint a new auditor after five years; and
- Providing for the QCA to audit any decision made by QR Network pursuant to the Undertaking where it is reasonable grounds to do so.

Outstanding issues

QR Network believes that the following issues have not been resolved with the QCA and further information on QR Network's positions on these issues of contention are summarised below.

1. Preparation of general purpose financial statements

The requirement to prepare audited general purpose financial statements is considered as excessive and QR Network does not see the reasoning to justify a move away from the 2008 Undertaking requirements. QR Network believes that there is no regulatory precedent to justify the imposition of such a highly detailed form of regulatory account reporting.

2. Incentive Mechanism

QR Network partially accepts the QCA's position on the incentive mechanism. QR Network maintains that it is sufficiently incentivised to maximise coal system throughput through other means and that the Access Agreement and back-ended haulage agreements should represent the appropriate instruments for determining service and performance objectives. However, QR Network accepts stakeholder concerns that QR Network's management should have a more direct incentive structure to meet the needs and aspirations of its Customers. Therefore, QR Network proposes to negotiate with affected stakeholders on an appropriate incentive framework and submit a Draft Incentive Mechanism within 12 months from the date of approval.

QR Network maintains it concern that the breach or negligence test as part of the revenue cap should be assessed at a system level, rather than at an origin to destination level. Therefore, until the Draft Incentive Mechanism is approved, QR Network has proposed a reasonable threshold for this system test and reinstated the upside increment to introduce symmetry into the framework.

3. Review of Rail Infrastructure

QR Network has reinstated the rail transport infrastructure related QR Party transfer provisions from the 2008AU. However, QR Network maintains reliance on rail transport infrastructure definitions in the Transport Infrastructure Act for assessing the declaration involves some uncertainty regarding the status of some infrastructure such as provisioning. Accordingly, QR Network has modified the provisions to ensure the matters which must be considered by the QCA in recommending declaration are considered in the relation to transfers associated with rail infrastructure which does not clearly satisfy the 'rail transport infrastructure' definition.

4. Maintenance Costs

QR Network considers its proposed maintenance costs in the September 2008 were robustly developed, considered reasonable in peer reviews and efficient relative to benchmarking analysis undertaken by Worley Parsons. The maintenance costs are also efficient when appropriately adjustments and qualifications are made to the analysis undertaken by GHD on behalf of the QCA. In addition, the response to the draft decision and this submission provide justification for the:

- inclusion of the original ballast undercutting claim adjusted for asset charges associated with intended investment in spoil management wagons;
- inclusion of appropriate and reasonable allowances for corporate overhead, working capital and contingency/inventive margins while ensuring the maintenance service provider earns an appropriate return on its invested capital; and
- exclusion of an efficiency factor given the further increases in the expected maintenance costs in excess of the maintenance cost allowance claim and the absence of any objective evidence demonstrating the original submission included inefficiencies.

5. Weighted Average Cost of Capital

QR Network maintains that the QCA draft decision on the asset beta and the term of the risk free rate represent material regulatory errors. In this regard, QR Network has submitted a cost of capital which is consistent with regulatory precedent and recognises the inherent uncertainty in determining the equity beta for a stand-alone heavy haul railway in the absence of any direct comparators.

INTRODUCTION TO QR NETWORK'S SUBMISSION

This submission is submitted in accordance with section 136(1) of the *Queensland Competition Authority Act 1997* (QCA Act). The lodgement of this document represents a formal withdrawal of the draft 2009 Access Undertaking submitted by QR Network to the QCA in September 2008.

This submission is comprised of five volumes with relevant attachments:

- Volume 1. Policy items included in the 2010 Draft Amending Undertaking
- Volume 2. Detailed drafting changes (Part 1-12 and Schedules). A mark-up is provided between the 2010 DAU and **QR Network's 2009 DAU submitted in September 2008.**
- Volume 3. Detailed drafting (Part 1-12 and Schedules)
- Volume 4. Standard Access (Operator) Agreement and Standard Access (Access Holder) Agreements marked up against the 2008 Access Agreements
- Volume 5. Standard Access Operator Agreement and Standard Access Access Holder Agreements

The positions within this submission consider the QCA's draft decision issued on 18 December 2009, stakeholder responses to the draft decision and stakeholder views provided in consultation meetings within 2010.

For the avoidance of doubt, all documents included in Attachments A to G of QR Network's response to the QCA's Draft Decision on 15 February 2010 form part of this submission.

Key to reading detailed drafting in the marked up documents in Volume 2

For ease of reference, QR Network has colour coded the mark-ups in Volume 2 to represent the following classifications for amendment:

- Mark-up in red is the removal of previous or obsolete drafting
- Mark-up in purple is drafting which has been suggested by the QCA (or drafting which is very close to that suggested and has the same outcome)
- Mark-up in blue is new material added by QR Network in accordance with Section 1 of this submission
- Mark-up in brown is drafting provided by QR Network where it believes its drafting is sufficient or relevant to the issue.
- Mark-up in green is drafting moved by QR Network from the 2009 DAU

Additional material to that provided in the draft 2009 Undertaking has been included in this document such as proposals for mechanisms relating to supply chain planning and coordination. This was the subject of a public exposure draft released in January 2010.

Financial Model

A number of detailed financial models support the determination of the Reference Tariffs in Schedule F (and which relate only to coal carrying Train Services operating in the Central Queensland Coal Region and the Western Systems) and have been prepared by QR Network and are provided concurrently with this submission. The models contain specific information on assumptions, including information on individual Train Services and costs associated with activities which could be sourced from third party suppliers. In this regard:

- QR Network confirms that the Train Service Entitlements set out in the models operate back-to-back with above rail haulage arrangements agreed to between the Access Holder and the mines; and
- Selected services for the operating costs modelled are provided by QR business groups (such as for capital expenditure projects) and are also provided by 3rd party suppliers subject to service arrangements negotiated on an 'arms length' basis.

Accordingly, QR Network believes that the information contained in the models is commercial-in-confidence and accordingly, should not be publicly disclosed. This position is consistent with previous related information provided to the QCA. QR Network confirms that the model outputs are summarised in the submission.

Layout of the Submission

This submission provides comments on those issues which QR Network has not accepted as part of the QCA's draft decision. Further this document and the attached drafting addressed additional matters which have not previously been formally presented to stakeholders. The submission follows the following outline:

- Section 1 of this submission details new material within the Undertaking and includes provisions relating to the proposed horizontal separation of the Central Queensland Coal Region (CQCR) from the remainder of the Queensland narrow gauge rail network.
- Section 2 of this submission outlines non-pricing policy areas QR Network does not accept within the QCA draft decision or outlines QR Network's policy position in the 2010 DAU where this is materially different from that previously communicated.
- Section 3 of this document is a table outlining the QCA decisions that QR Network has accepted with reference to the affected clauses and draft decision reference numbers.
- Section 4 of this submission details the relevant inputs to the determination of Reference Tariffs for coal carrying train services in the CQCR and the Western System.

Detailed amendments required to the clauses in the Undertaking which are consistent with either the QCA's draft decision or other matters are contained in Volume 2.

References

In this submission:

- References to QR Network are in the context of QR Network's activities which are proposed to be regulated by the 2009 Undertaking.
- References to UT1 are to the period covered by the 2001 Undertaking, effective 1 July 2001.
- References to UT2 are to the period covered by the 2005 Undertaking, effective 1 July 2005, and the 2008 Undertaking effective 1 September 2008.
- References to UT3 are to the period covered by the 2009 Undertaking which is expected to become effective from 1 July 2010, except for the reference tariffs which will be applied retrospectively from 1 July 2009.
- References to the draft 2009 Undertaking or 2009 DAU refer to the submission made by QR Network to the QCA on 9 September 2008.
- References to the 2010 DAU refers to this submission.
- References to the 2009 Undertaking refer to the 2010 DAU when approved
- References to "mines" are to coal mine owners as end customers pursuant to a haulage agreement with an Access Holder.
- Other than for Internal Access Agreements and Rail Transport Infrastructure which are referenced in the 2008 Undertaking, defined terms in the submission have the meaning given in the 2010 DAU.

This page has been left blank intentionally

1 NEW ISSUES RAISED IN THIS UNDERTAKING

1.1 INTRODUCTION

The following issues have been inserted into the 2010 DAU because of the proposed privatisation of QR Network or as a consequence of stakeholder consultation:

- Transitional provisions
- Anti- discrimination provision
- Adjustment Charge process
- Standard Access Agreements
 1. Consequential Loss
 2. Public Liability Insurance Cover
 3. Access Holder Security Requirements
- Supply Chain Principles
- Performance Reporting Requirements
- Auditing Processes
- Capacity Expansion and Investment Framework

Details of each of these issues are provided below.

1.2 TRANSITIONAL PROVISIONS

On 2 June 2009, the Honourable Premier of Queensland and the Treasurer announced the Queensland Government's intention¹ to:

- transfer rail transport infrastructure not forming part of the CQCR to a new government owned corporation (GOC) which will be vertically integrated with passenger train services; and
- privatise the rail transport infrastructure in the CQCR with the above rail freight operations of the QR Ltd Group via a public float on the Australian Stock Exchange.

¹ .Premier and Minister for the Arts and Treasurer and Minister for Employment and Economic Development (2009) Joint Statement – Renewing Queensland: Future Investment Plan, 2 June.

Section 136 of the QCA Act requires that an Access Undertaking can only be given by the owner or operator of the declared service. As a consequence, the Access Undertaking given by QR Network Pty Ltd can only apply to the provision of the declared service in the CQCR following the transfer of the non-CQCR rail transport infrastructure to the new GOC.

It is the objective of QR Network and the Queensland Government to ensure that the respective railway managers, Access Seekers and Access Holders have a reasonable degree of commercial and regulatory certainty during the transition period.

Section 9j of the *Infrastructure Investment (Asset Restructuring and Disposal) Act 2009* (Qld) provides for the relevant Minister to issue a transfer notice for a declared project which specifies how an instrument is to apply to a declared entity.

QR Network proposes to manage the transition through limited amendments to the 2010 DAU in conjunction with the issuance of a transfer notice. A limitation with the use of a transfer notice is that it may only prescribe how the entity is to comply with that notice (ie. the notice does not have the effect of amending the instrument). In order for the transfer notice to prescribe how the new GOC is required to comply with the 2009 Undertaking the scope of services to be included in the 2010 DAU must include the rail transport infrastructure owned by both railway managers.

Upon transfer of covered assets to the new GOC the transfer notice has the effect of making both the new GOC and QR Network parties to the 2010 DAU until such time as the transfer notice terminates.

UT2 and the 2010 DAU are strongly influenced by the provision of coal carrying train services in the CQCR. Due to this influence the stand-alone Access Undertaking requires minimal variation to reflect the change in scope. In contrast, the Access Undertaking which should apply to the new GOC will be significantly condensed from that applicable to the CQCR.

It is expected that the new GOC will prepare and submit its own access undertaking to the QCA shortly after approval of the 2010 DAU. Upon approval of the new GOC's access undertaking the QR Network Pty Ltd 2009 Undertaking will apply only to the CQCR. In order to reflect this outcome, QR Network has prepared transition drafting

in section 12.5 which allows proper interpretation and application of obligations to reflect the service for which QR Network is the railway manager following the transfer event.

The QCA draft decision and the 2010 DAU include obligations for changes to the regulatory framework, including the development of the alternate form of agreement, which may require consequential amendments via a draft amending access undertaking. QR Network expects that any consequential amendments to reflect the transfer of non-CQCR assets can also be implemented during this or subsequent processes.

A key aspect of the transition provisions is the ability for QR Network to provide Confidential Information as defined in the 2010 DAU to the new GOC. This is considered necessary to ensure sufficient coordination between the two Railway Managers in the negotiation of an Access Agreement for train services which operate over rail infrastructure owned by more than one Railway Manager.

1.3 ANTI-DISCRIMINATION PROVISION

Section 104 of the QCA Act obligates the provider of the declared service to not discriminate between the terms and conditions and the nature or quality of the service provided to a third party operator relative to a related party operator. The obligation is absolute except where discrimination is expressly permitted under the Act or the approved access undertaking (i.e. pricing principles).

The QR Network Access Undertaking includes an array of provisions aimed at ensuring compliance with the obligations in s.104. These provisions include, but are not limited to:

- decision making principles and annual compliance auditing;
- Reference Tariffs;
- Ring-fencing and accounting keeping;
- Network Management Principles (NMP);
- Reporting requirements including any written complaints received by an Access Holder regarding compliance with the NMP;
- Standard Access Agreement; and
- Publication of coal access agreements.

However, the obligations in s.104 of the QCA Act extend only to discrimination in providing access pursuant to an Access Agreement. It has not been considered necessary for the obligation to extend beyond this as the Undertaking prescribes the timeframes and principles for which decisions relating to the negotiation of an access agreement are made. Some stakeholders do not consider this framework to provide sufficient protection to third party operators who are access seekers or access seekers who may seek to utilise a third party operator.

In light of addressing these concerns and to demonstrate QR Network's commitment to treating all access seekers in a fair and non-discriminatory manner, QR Network has included within clause 2.2 a new provision that explicitly outlines that it will not unfairly discriminate between Access Seekers in the process of negotiating Access. This provision is similar in nature to section 16 of the *Rail Access Code (2000)* in the Western Australian regulatory regime which states that a network operator will not discriminate between one proponent or another.

QR Network has also included a complaint handling and audit process in order to manage compliance with this obligation. The process provides for the Access Provider to investigate and respond to claims by an Access Seeker or an Access Holder in the first instance that QR Network has engaged in conduct contrary to clause 2.2. Where the complainant is not satisfied with QR Network's investigation and response to the complaint, it may then be subject to audit by the QCA. The process avoids the possibility of vexatious complaints being immediately referred to the QCA for consideration.

1.4 ADJUSTMENT CHARGE PROCESS

QR Network proposes to include a mechanism in the 2010 DAU to enable the recovery of variations in Reference Tariffs which have retrospective effect. This mechanism is particularly relevant to the recovery of UT3 reference tariffs from Access Holders for coal carrying train services for the 2009/10 financial year but has application to future regulatory decisions which have retrospective effect.

When QR Network submitted its 2009 DAU, it was envisaged that the 2008 AU would have an expiry date of June 30, 2009 after which time it would charge its approved UT3 tariffs. As this has not occurred, the reference tariffs actually charged during the

2009/10 year were those charged in the last billing period of 2008/09 indexed by CPI for each subsequent billing period.

When the reference tariffs are approved by the QCA under the 2009 Undertaking, they are likely to be materially different from those actually recovered over the 2009/10 year. In addition, the implementation of System pricing to commence from 1 July 2009 will require both positive and negative adjustments depending on the relativity of the cluster price to the system price. Accordingly QR Network proposes to include a mechanism that will allow it to recover the full system allowable revenue for the 2009/10 year calculated in accordance with the final 2009 Undertaking. This position has been previously communicated in the two draft amending access undertakings which extended the terminating date for UT2.

QR Network circulated an information paper in June 2009² outlining the options it considered were available to recover/refund the difference. Its preferred option was the uplift of reference tariffs for the remainder of the 2009/10 year after the approval of the 2009 Undertaking to recover the amount of access charges not recovered during that part of the 2009/10 year prior to the approval of the 2009 Undertaking and making those reference tariffs effective from the date of approval of the 2009 Undertaking.

When that consultation paper was circulated it was envisaged that the 2009 Undertaking would be approved by December 31, 2009. This would in effect allow the recovery of the difference in access charges over the second half of 2009/10. This is now not possible given that the 2009 Undertaking will not be approved until the end of 2009/10.

Given the change in timeframes and stakeholder preference, QR Network proposes an alternate option which involves the calculation of an adjustment charge. The adjustment charge works in the following manner:

- The reference tariffs for the 2009/10 year are approved by the QCA under the 2009 Undertaking and applied for the whole year.
- The charges recoverable from access holders are calculated in accordance with the approved tariffs for the 2009/10 year.

² QR Network (2009). "Recovery of 2009-10 System Allowable Revenue"

- An adjustment charge is calculated for each access holder based on the difference between the access charges already paid in the 2009/10 year up until the 2009 Undertaking is approved and the access charges approved by the QCA as above, calculated on a monthly basis.
- The adjustment charge will include the interest amounts for the periods between the billing dates and the actual payment dates, calculated on a monthly basis.
- The adjustment charge is added to the access holder's bill in a billing period subsequent to the approval of the adjustment charge pursuant to the 2009 Undertaking.

QR Network recognises that it can only recover the adjustment charge from an Access Holder where that access holder was running train services in a prior period and continues to run the same services in the period in which QR Network will apply the adjustment charge (i.e. the Access Holder responsible for operating past train services continues to have a train service entitlement and haulage agreement for the respective origin to destination and the same Customer). The exception to this principle is where the respective train service entitlements have been the subject of a Customer initiated transfer. QR Network will only endorse the Customer initiated transfer where the Customer has agreed to meet the adjustment charge for past train services with a new operator.

Where a train service entitlement for the respective origin to destination and the same Customer is no longer included in an Access Agreement for the Access Holder who operated those services, QR Network has no contractual right to seek adjustment charges. As QR Network is not entitled to earn the revenue associated with those charges any revenue shortfall must be included in the revenue cap adjustment.

QR Network clarifies that the imposition of any adjustment charge is subject to prior QCA approval. It will submit to the QCA its proposed adjustment charges, outlining the access holders to which an adjustment charge will apply; the adjustment charge and its calculation for each access holder; and the billing period to which the adjustment charge will apply.

The Undertaking also includes a QCA approval process and mechanism to allow QR Network to submit revised adjustment charges where these are not approved. The definition of Total Actual Revenue has also been amended to allow the recognition of the adjustment charge revenue (net of any interest component) to be recognised for revenue cap purposes in the period it was determined and not the period it was billed.

To ensure consistency with Access Agreements, QR Network has included provisions within Access Agreements and Standard Access Agreement that require the calculation and payment of an adjustment charge. This also ensures that there is a reasonable degree of risk equivalence between the Standard Access Agreement for Operators and the Capacity Agreements for be developed during UT3.

1.5 STANDARD ACCESS AGREEMENTS

QR Network provides at Volume 2 to the 2010 DAU the Standard Access (Operator) Agreement and Standard Access (Access Holder) Agreement. These agreements reflect changes as a result of the 2009 Undertaking and also changes in policy position by QR Network on the following matters:

1.5.1 Consequential Loss

QR Network sought the inclusion of new consequential loss provisions in its Standard Access (Operator) Agreement when the 2008 Undertaking was negotiated. These provisions were sought to alleviate an unintended consequence that occurred to the consequential loss provisions as a result of the separation of QR Network into a subsidiary of QR Limited.

At this time stakeholders raised concerns that agreements in the UT2 period should remain consistent over the period, however it was recognised that the consequential loss provisions should be amended in the next regulatory period. The QCA in its decision agreed with this principle as well.

QR Network now proposes to make these amendments to the consequential loss provisions within its Standard Access (Operator) Agreement.

QR Network has included provisions at clause 3 of its Operator agreement which provides options for an Operator to acquire a waiver of consequential loss from their customer so that the customer has no claim for consequential loss against QR Network. This requirement places the customer in the same position that it would be had it signed an Access Holder agreement.

1.5.2 Public Liability insurance coverage

QR Network's required customer public liability coverage amount within its Standard Access Agreement has remained fixed at \$250 million since 2001.

QR Network is proposing an increase in this amount to \$350 million. This reflects the required coverage level given the interaction of passenger and coal carrying train services in the Central Queensland Coal Region. Further, this amount represents an indexation of the previous coverage amount by CPI over the period 2001 to 2010.

The proposed \$350 million threshold represents the coverage level in QR Network and related QR Party insurance policies. This limit has been determined in consultation with QR Network's re-insurers. In this regard, QR Network notes that in the event that the threshold level is considered excessive by an Access Seeker that party would need to provide the necessary evidence that a lower threshold is appropriate in order for QR Network to differentiate on the basis of cost or risk.

1.5.3 Security Arrangements

QR Network is seeking to amend the security requirements which QR Network may seek for coal carrying train services in the Standard Access Agreement from the current 12 weeks of Access Charges.

This change is to mitigate QR Network's commercial risk arising from a number of changes in the Undertaking since UT1, such as the Take-or-Pay (ToP) provisions and the revenue cap form of regulation.

The UT1 ToP provisions comprised a variable and an annual ToP payment structure which is charged monthly. In the event that the Access Holder significantly underutilised its access rights for a large part of the financial year QR Network would be able to recover ToP payments through the monthly invoices. Any default in the

monthly invoices would be covered by the 3 month security. In the event of default the Security Deposit would be retained.

The UT1 and UT2 frameworks also included assessment of utilisation of access rights on a quarterly basis. Therefore in the event that the underutilisation is material, QR Network is able to resume those Access Rights in accordance with the terms of the relevant Agreement.

Under UT2, the change in the ToP arrangements to an annual process and the increase in the ToP liabilities (to 100% of AT2-4) may allow an Access Holder to accrue a ToP liability materially in excess of the Security Deposit which is based on 12 weeks of Access Charges. The commercial risk to QR Network arises as the Total Actual Revenue definition employed in the Revenue Cap Adjustment requires QR Network to include revenue it is 'entitled' to earn or 'actually earned' irrespective of whether or not QR Network actually collects this revenue. In the event of default which is likely to occur after the 'relevant' Year, QR Network would be legally obliged to recognise unrecoverable revenue in its revenue cap adjustment.

Proposed changes to the UT3 capacity management arrangements exacerbate this risk. As utilisation of coal carrying train paths is to be assessed on a rolling 12 month basis an Access Holder would be able to significantly underutilise its paths for an extended period before QR Network would be able to limit its exposure through resumption.

QR Network notes there are three options to addressing this commercial risk:

- QR Network may either seek to transfer the risk by ensuring it is not penalised by the Revenue Cap adjustment process;
- Include monthly take-or-pay obligations on the full amount (as in the draft ARTC Hunter Valley Access Undertaking);
- Mitigate the risk by increasing the Security Deposit requirements to a period in excess of 3 month.

QR Network does not consider that Access Holder default should form a legitimate basis for socialisation of risk and therefore considers that the most effective means of addressing its commercial risk is to ensure it is mitigated directly through the terms and conditions with the counterparty to the Agreement.

A key policy objective in UT3 was to seek to remove the disparity in Take-or-pay arrangements across different regulatory periods. Materially altering the Take-or-pay provisions from UT2 would not be consistent with this objective.

Finally, QR Network could increase the security requirement from 3 months to 14 months to cover a fully annual billing cycle. However, this may raise concerns regarding the materiality of the security arrangements and the determination of the 14 months with reference to maximum potential liability arising under an Access Agreement within a 12 month period.

As the security requirement should be reasonably reflective of the probability of losses occurring, QR Network proposes to amend the security arrangements such that the minimum three months security prevails until such time as the potential liabilities accrue to a threshold which warrants the payment of additional security amounts.

On this basis, QR Network proposes that it may continue to seek three months security from all Access Holders against take or pay liabilities (the current mechanism in the Standard Access Agreement). Where a customer's accrued liabilities (i.e. the Take-or-pay amounts which could become payable) exceeds 66 per cent of the original security amount, QR Network will seek an additional three months security. This additional amount will be refunded at the end of the annual billing cycle when all outstanding take-or-pay amounts are paid or where the take or pay liability falls below 25 per cent of the original security amount. Should a customer further exceed 66 percent of the original and additional security amounts held by QR Network a further amount of security would be sought and subject to the same refund provision outlined above.

QR Network believes that this mechanism is a targeted and measured approach to providing additional security and alleviates its exposures to the changes in the ToP regime.

1.6 SUPPLY CHAIN PRINCIPLES

QR Network proposes amendments within this submission which relate to how it interacts with the coal supply chain. A number of these changes have been driven by the principles agreed as part of the Dalrymple Bay Coal Chain Long Term Solution (DBCT LTS).

The DBCT LTS implementation memorandum was executed on 1 April 2010. The intent of the implementation memorandum is to specify the objectives which participants agree to negotiate in good faith the detail as to how those objectives will be given effect. In this context, QR Network has included the principles in the 2010DAU which it believes reflects the intent of the principles within the implementation which can be applied more broadly across the Central Queensland Coal Region.

The included principles/clauses were the subject of an Exposure Draft released by QR Network in January 2010 and stakeholder responses were noted especially on the difference between the principles and specific LTS objectives.

The intent of the LTS implementation memorandum is to work towards agreement on the frameworks which will be binding on the participants. As a consequence QR Network will be required to comply with those agreements which may be facilitated through a draft amending undertaking to the 2009 Undertaking or via other instruments such as specific terms and condition in Access Agreements applicable for capacity above 85 mtpa at DBCT. For example, the resumption provisions in the relevant agreements should be aligned to ensure resumption by DBCT triggers resumption by QR Network.

1.6.1 Changes from LTS finalisation

To reflect outcomes from the LTS when finalised, QR Network may be required to alter its Standard Access Agreements or submit a Draft Amending Undertaking in order to implement its agreed obligations. This mirrors clause 1.4 of the DBCT draft access undertaking submitted to the QCA in March 2010 and enables all opportunities for the efficiency of the coal supply chain to be outlined. QR Network believes it is in the interest of participants that the QCA should consider the

alignment of the QR Network and DBCT access undertakings in giving effect to the negotiated outcomes from the finalisation of the LTS by considering the respective draft amending undertakings concurrently.

It should be noted that specific changes from the LTS will more easily be reflected in future contracts (per section 2.2(c)(ii) of the LTS Memorandum) and will only be applicable for tonnages above 85 Million tonnes per annum at DBCT³.

1.6.2 Supply Chain Assumptions

It has become clear through the LTS and Master Planning processes that consistent supply chain operating assumptions, where possible to define, are a crucial input to supply chain planning. The agreement among service providers on the relevant system operating assumptions for a system have an important role in ensuring individual capacity assumptions across different elements of the supply chain are not materially misaligned. These provide transparency about the factors requiring improvement within a supply chain in order to increase throughput or robustness.

QR Network has previously sought assumptions from coal supply chain participants relating to Port and above rail operation to include in its Coal Rail Infrastructure Master Planning process. This has been limited in success.

Due to the increased emphasis from coal supply chains to ensure all planning assumptions are correlated, QR Network proposes to include drafting in clause 11.1.3 to outline how it will provide input into the creation of supply chain operating assumptions. Further it will ratify how it will participate in the creation and resolution of conflicts about supply chain operating assumptions.

1.6.3 Supply Chain Master Planning

QR Network proposes amendments to Part 11 of its Undertaking to include a mechanism which considers the issue of a System Master Plan as well as the Coal Rail Infrastructure Master Plan (CRIMP). QR Network agrees to provide customers with a CRIMP document which uses supply chain assumptions similar to those used in a System Master Plan. QR Network also has the ability to provide a CRIMP which

³ LTS Memorandum, clause 2.2(b)

is not consistent with a System Master Plan as long as it provides an explanation of these differences.

1.6.4 Contracting for capacity in coal supply chains

QR Network proposed the following in its response to the QCA's draft decision:

Drafting to be included at clause 11.3 will define the process that QR Network will take when the capacity of a proposed expansion project does not result in the expected increase in tonnage. This involves a process to evaluate and define the amount of capacity that has not been provided by the project and a mechanism to pro-rate the entitlements of Access Seekers that sought access to the new capacity. Where an Access Seeker has their access rights reduced in this manner they will be referred to as "Conditional Access Holders"

Consequential amendments have also been made to clause 7.3.5(g) to enable the queuing of these Conditional Access Holders at the top of the queue (below renewal applications) for new capacity on the part of the system where it was reduced as part of the post project evaluation of capacity.⁴

QR Network has chosen to include a mechanism that could be applied to all coal supply chains and has not presupposed the outcome of the DBCC LTS discussion on these matters. Where there are clear outcomes from the DBCC LTS process that can be applied to specific contacts, where Dalrymple Bay Coal Terminal is the destination, these specific conditions will be reflected in the terms of the Access Agreement negotiated with each customer.

1.6.5 Transfer of customer information

To facilitate the alignment of capacity between infrastructure providers in the coal supply chain, QR Network proposes amendments to clause 3.3(d)(ii)(L). This will allow QR Network to provide supply chain infrastructure providers with third-party information, where this enhances the ability of the provider to establish supply chain operating assumptions. This is subject to customer approval of the release of this information by QR Network and is also on the proviso that this information is kept confidential.

⁴ QR Network Response to QCA Draft Decision, Volume 1, pg 86

1.6.6 No Fetter

QR Network has included drafting for the avoidance of doubt that it is not obliged by the drafting in this new section that would inhibit, restrict, fetter or adversely affect its ability to exercise any discretion, function or right in accordance with the Undertaking or an Access Agreement.

QR Network is seeking to maintain its commercial discretion within the Undertaking in relation to clause 11.1 (Supply Chain Coordination) and clause 11.3 (Contractual Alignment) as the circumstances in which these clauses are to be applied are not currently governed through formal agreements between participants of the relevant Supply Chain Group(s). The objective of the DBCT LTS implementation memorandum is to create the relevant formal agreement and obligations among participants.

1.7 PERFORMANCE REPORTING REQUIREMENTS

The 2009 DAU proposed expanded quarterly performance reporting provisions which increased the level of detail to be provided to the QCA and Operators and amended the information requirements to ensure that this was more relevant. These changes involved:

- reporting the performance indicators by coal system; and
- introducing an on-time running indicator in place of the previous reporting indicator of healthy/unhealthy train services.

The QCA welcomed these revised reporting requirements in the Draft Decision. They noted that the proposed changes “should enhance transparency and thereby improve the ability of all stakeholders to identify performance issues facing each system”⁵.

The majority of stakeholders have subsequently indicated their general satisfaction with the level and nature of QR Network’s reporting arrangements. One stakeholder was concerned that there was not sufficient information to allow an access holder or

⁵ Queensland Competition Authority (2009), p.225.

seeker to identify whether QR Network was discriminating against a third party above rail operator in favour of QR's above rail entity.

The 2010 DAU as submitted contains extensive protections for third party access seekers and holders that prevent the discriminatory provision of access to those parties. As previously discussed, these protections include strong ringfencing arrangements, ringfencing and decision making audits, detailed complaints handling and dispute resolution processes as well as an overarching non-discrimination provision. In addition, Access Holders also have access to real-time traffic information as required under Schedule G, which allows them to identify decisions made in contravention of the Network Management Principles.

1.7.1 New reporting inclusions

Notwithstanding this QR Network has included the following additional items within the annual/ quarterly performance reports as requested by stakeholders:

- Disaggregating the quarterly performance report by operators;
- Disaggregation of the annual report by related QR parts and all third parties
- An additional indicator on contracted train paths

QR Network considers that its proposal within the 2009 DAU to report performance indicators by coal system already meets a stakeholder demand for reporting to be segmented by geographic location. It should be noted that QR Network believes that any further disaggregation to report by specific track section would be an excessively onerous obligation that may not necessarily achieve its intended objective. It is possible that line section data could be misinterpreted especially where there could be valid reasons why a specific portion of track has differing performance to other parts of the network. These may be attributable to unrelated performance issues.

QR Network did not propose reporting by party (those being a QR party, third party operators or end customers) in its 2009 DAU as it believes individual access seekers should be capable of collecting statistical information in relation to QR Network's provision of the declared service as it relates to that party. It should therefore be possible for an individual Access Holder to identify any systematic practice of discriminatory provision of access by comparison of its own recorded information against system-wide aggregates. However, QR Network does acknowledge that confidence in the regulatory framework could be enhanced with the reporting of

performance indicators by party to demonstrate its commitment to treat all third parties fairly and in a non-discriminatory way. As such, it is proposing to prepare additional non-public quarterly and annual performance reports which further disaggregate performance indicators by QR Party and Non-QR Party.

Reports that provide operator or end customer specific information will not be made public as may contain commercially sensitive information. It is envisaged that these reports will inform the regulators decision-making regarding targeted audit areas in preparation of the annual audit plan. Operators will be provided with versions of the quarterly performance reports which include details of performance as it relates to its operations. A public report will be available without disaggregation and all other reports will be provided publicly in accordance with Part 9 of the 2010 DAU.

QR Network also proposes a new performance indicator within the quarterly performance reports, that being contracted train paths provided. This indicator along with the already proposed indicator on actual train paths used will allow stakeholders to determine the proportion of contracted train paths that are actually being met. They will be included in both the public and non-public reports.

Consistent with QCA's decision 9.1, QR Network will also provide the methodology behind the calculation of the below rail transit time performance variable within the quarterly performance reports.

1.8 AUDIT PROCESSES

The 2010DAU also includes augmentation of the audit processes. Key changes include:

- Criteria relating to the independence of the auditor;
- Option for QCA to appoint a replacement auditor if a single Auditor has undertaken the previous five annual audits; and
- Ability for QCA to audit decisions made pursuant to the Undertaking where it has reasonable grounds to do so.

QR Network has also amended 9.7 to extend the auditing obligations to all regulatory reports prepared in accordance with Chapter 9 of the Undertaking. QR Network considers this will engender confidence in the regime and QR Network's performance under the regime.

However, QR Network notes that these additional auditing obligations are likely to significantly increase QR Network's compliance costs. As the operating costs proposed by the QCA and accepted by QR Network do not make provision for these additional costs, QR Network proposes to include an additional provision in the Review Event definition to include additional allowances for compliance auditing when the likely or actual costs of those activities become known.

1.9 CAPACITY EXPANSION AND INVESTMENT FRAMEWORK

1.9.1 Introduction

QR Network proposed a process to deal with major capacity expansion within its 2009 DAU which it believed would enable it to:

- a) reject Access applications where these could only be negotiated where capacity existed from a major expansion of the rail network;
- b) provide a register of parties interested in the creation of capacity that could be brought about from an investment in a major expansion of the rail network;
- c) seek Access Conditions to mitigate financial risks associated with Infrastructure Enhancements; and
- d) provide a process, including dispute resolution, for the allocation of capacity where a major expansion was undertaken.

The QCA's draft decision acknowledged the deficiencies in the UT2 capacity allocation process to appropriately manage investment in major infrastructure enhancements. Further, the QCA considered that the process proposed by QR Network did not provide clarity on the how capacity would be allocated. In seeking to address this concern the draft decision included a requirement that Undertaking detail a more formal consultation process and apply prescribed factors to the capacity allocation decision.

QR Network welcomes the acknowledgement of the deficiencies in the current framework but raises concerns that the process envisaged by the QCA did not align with the normal commercial practice and project development phases. Stakeholders also acknowledged the need to adequately address capacity allocation on major infrastructure enhancements, but some concerns were raised regarding the QCA's proposed model.

Stakeholder responses to the draft decision also raised concerns with the incentives of a privatised QR Network regarding the timely and efficient investment in capacity (both minor and major infrastructure enhancements).

QR Network has summarised the issues raised by stakeholders to include:

- QR Network should have a general obligation to expand the network and in some instances the regulatory approved cost of capital should be deemed reasonable;
- QR Network should have an obligation to ensure the network is expanded within the timeframes necessary to meet the needs of Customers and align with the expansion of other elements of the supply chain;
- QR Network should not possess any commercial leverage in negotiation of Access Conditions which requires Customers to evaluate between the cost of project delays and the cost of accepting QR Network proposed Access Conditions;
- Capacity allocation should need only be based on acceptance of access conditions and demonstrated ability to utilise train paths⁶; and
- QR Network should not have the ability to redirect resourcing within its project pipeline to prioritise investment in projects which are commercially favourable to a related QR Party.

QR Network acknowledges the issues raised by stakeholders and agrees with the intent that the Undertaking should adequately address these issues. However, QR Network does not support the principle that it should have an obligation to place its own capital at risk by being compelled to invest at the approved regulatory cost of capital. Section 44W of the *Trade Practices Act 1974* (TPA) and section 119 of the

⁶ Anglo American Metallurgical Coal Pty Ltd (2010) Submission to the Queensland Competition Authority – QR's Rail Access Undertaking (UT3), p.12 <http://www.qca.org.au/files/R-2009DAU-Anglo-SubQR09DAU-0210.PDF>

QCA Act restrict a regulator making a determination which would require the access provider to bear some or all of the costs associated with extending a facility.

The Australian Competition and Consumer Commission's draft decision on the Hunter Valley Access Undertaking (HVAU) also noted that:

'if a project is endorsed as prudent, and [the provider] has long term take or pay contacts in place, then [the provider] will proceed with an expansion, but that does not take into account the possibility that funding may not be available at commercially reasonable levels in order for [the provider] to be able to provide Additional Capacity⁷ Further, that the provider should not be subject to uncommercial funding costs associated with construction of any requested Additional Capacity⁸,

QR Network notes that some Stakeholders have indicated that the Undertaking should include a more detailed capacity expansion framework similar to that included in Chapter 6 of the HVAU. In this regard QR Network notes the ACCC has raised concerns with this framework in its draft decision and made recommendations about how that framework would need to be amended to satisfy the relevant criteria in Part IIIA of the TPA.

In summary, the ACCC considers it important that the HVAU provides for sufficient certainty and clarity in its terms, effects and operation in order to enable the access provider and access seekers to be clear about their respective rights and obligations, and thereby avoid unnecessary costs, monetary or otherwise, when utilising the processes set by the HVAU. However, the ACCC also acknowledges that:

- any decision to consent to the provision of additional capacity is ultimately a decision for the service provider involving consideration of its legitimate business interests; and
- the access undertaking should not set out strict rules which oblige the service provider to comply with the recommendations of an Applicant.

⁷ ACCC - Draft Decision on ARTC HVAU (2010), pg 359

⁸ Ibid pg 359

The ACCC noted the following factors need to be addressed within the HVAU capacity expansion framework:

- the status of network extensions and issues associated with access to land owned for ARTC must be clearly understood;
- the decision-making associated with consenting to additional capacity should include a reasonableness requirement;
- various elements of the framework are not well defined or understood; and
- the terms and conditions under which ARTC will consent to Additional Capacity must be clear and transparent through an appropriate consultation framework.

In response to industry concerns QR Network has reviewed its capacity expansion process to provide a holistic approach to investment which it believes provides an appropriate balance between QR Network's legitimate business interests and those of Access Holders and potential Access Seekers. In developing this framework, QR Network has considered the views expressed by stakeholders and the consideration of similar issues raised by the ACCC in its consideration of the HVAU.

1.9.2 Underlying Principles of Capacity Expansion and Infrastructure Enhancement Framework

QR Network has developed the capacity expansion framework to align with the following principles.

- The Undertaking should provide an overarching framework regarding the process of commercial negotiation and should reflect agreed principles and not be prescriptive.
- QR Network's legitimate business interests are protected in that it is not compelled to invest or incur costs as a consequence of the expansion.
- Alignment with the objectives of Part 5 of the Queensland regulatory regime to promote competition in upstream and down stream markets.
- An appropriate balance of interests between the service provider and access seekers in regard to the prudence and timing of infrastructure enhancements and the reasonable conduct of QR Network in those negotiations.
- There exists a credible alternative to acceptance of QR Network's proposed commercial terms such that funding of the infrastructure enhancement is contestable. The framework provides for efficient investment in rail

infrastructure by enabling end-users to fund infrastructure enhancements on more favourable terms than those proposed by QR Network (having regard to the commercial and regulatory risks).

- There is a clear and transparent process for decision-making which is subject to dispute resolution processes.
- There is appropriate recognition of Customer rights with user-funded investment in terms of capacity rights and rebate provisions.

QR Network has classified infrastructure enhancements under three categories with the expansion framework dealing with each category in a specific manner. These categories include:

- Extensions;
- Incremental infrastructure enhancements; and
- Significant infrastructure enhancements.

1.9.3 Extensions

Extensions to the network include any rail transport infrastructure associated with the connection of new loading or unloading facilities to an Individual Coal System, or new rail transport infrastructure which connects an Individual Coal System to other rail transport infrastructure (i.e. the connecting rail transport infrastructure between Goonyella and Newlands systems). QR Network proposes to undertake extensions where in its opinion it is commercially justified. Where an Access Seeker does not agree with the terms and conditions proposed by QR Network, QR Network will facilitate connection of that Access Seeker's privately owned rail transport infrastructure to the declared facility in accordance with section 8.3 of the 2009 Undertaking.

QR Network notes this approach is consistent with:

- the approach to declaration in that the facility and services provided by extensions are generally mine specific and economic to duplicate;
- approaches in other markets with mine specific investment or connecting infrastructure usually being undertaken by the proponent of the project;
- the intent of section 118 of the QCA Act in that QR Network may be required to permit extension of the facility; and
- the Solicitor General's conclusions in the finalisation of UT2 regarding the application of the distance taper to private rail infrastructure and the objective

of promoting competition in the market for construction of rail transport infrastructure.

QR Network has also notes the ACCC raised issues about the exclusion of extensions from the HVAU where ARTC may be the owner of land which would be required to undertake the Infrastructure Enhancement. QR Network has addressed this issue by including obligations to provide access to land holdings necessary to develop the extension.

QR Network also confirms that customers would not be commercially disadvantaged where they elect to privately own an extension relative to QR Network owning the extension and including the assets in the regulatory asset base. Clause 6.4.2(b) requires the recognition of the private infrastructure costs in determining the access charge payable by train services operating on the private extension.

In order to assist potential Access Seeker's in understanding the likely commercially terms in order to develop privately owned extensions QR Network intends to make an Indicative Rail Connection Agreement available on request.

QR Network may, subject to agreed commercial terms and conditions, agree to provide its service as a Railway Manager for privately owned extensions.

1.9.4 Incremental Infrastructure Enhancements

QR Network proposes to continue to undertake minor infrastructure enhancements, and asset renewals.

QR Network may not seek access conditions on minor infrastructure enhancements unless the nature of the investment meets the conditions in 6.5.2 (is user specific and not shared rail transport infrastructure).

1.9.5 Significant Infrastructure Enhancements

A significant infrastructure enhancement is a major infrastructure enhancement which is associated with the creation of additional capacity rights for a new or upgraded loading or unloading facility and is likely to require capital expenditure in excess of

\$300 million. QR Network notes that these thresholds align with the QCA draft decision regarding the treatment of major projects.

QR Network has specifically drafted the consultation process for the negotiation of access rights to significant infrastructure enhancements to align with the relevant phases of project development and approval processes.

Where QR Network identifies that a significant infrastructure enhancement is required, QR Network will call for expressions of interest in additional capacity to be created by that enhancement. Alternatively, QR Network may seek expressions of interest where the owner or operator of the expanding or new unloading facility requests QR Network to do so. This ensures that investment in supply chain infrastructure proceeds in a timely and coordinated manner. If necessary, the respondent to the expression of interest (the Applicant) may also be required to fund or underwrite pre-feasibility costs.

During the prefeasibility phase QR Network will issue Applicants with a request for proposals in relation to the capacity that is expected to be made available if the infrastructure enhancement proceeds. QR Network will provide Applicants with details of:

- QR Network's preparedness to fund those enhancements;
- the anticipated costs and project timetable; and
- where QR Network is prepared to fund those enhancements:
 - any Access Conditions QR Network is seeking;
 - the aggregate Minimum Participation Threshold required for QR Network to proceed on the basis of the proposed Access Conditions; and
 - the period during which QR Network and Applicants will negotiate Access Conditions and other matters relevant to the provision of capacity.

Where QR Network elects not to fund the relevant enhancements the project will be funded through User Funding Agreements.

If QR Network elects to fund the relevant enhancements, then during the negotiation process Applicants may elect to terminate negotiations of access conditions and undertake the project subject to end-user funding. In determining the negotiation period QR Network must have reasonable regard to the timeframes necessary for Applicants to fund or procure funding to enable the project to be developed within the required timeframes.

The process also ensures that where Applicants believe they can secure funding and have a stronger overall commercial position than that implied in the Access Conditions being sought by QR Network then the Applicants can elect to directly fund those Infrastructure Enhancements. This outcome is consistent with the objects clause in Part 5 of the QCA Act regarding promoting efficient investment.

QR Network does not propose to prescribe a uniform minimum participation threshold. This will usually be specific to the nature of the project and will be determined on a case by case basis having regard to the commercial viability to proceed on the basis of acceptance of the negotiated Access Conditions.

Where the Applicants do accept the proposed Access Conditions capacity will be allocated on the basis of:

- acceptance of the Access Condition.
- demonstrated ability to utilise the Access Rights being sought.

QR Network notes this is consistent with the process promoted by Anglo American and reflects alternate drafting on Major Projects provided to the QCA prior to the draft decision.

1.9.6 User Funding Agreements

Where QR Network reasonably considers an infrastructure enhancement is not commercially justified, or Applicants have issued QR Network a notice to directly fund the enhancement, QR Network will proceed with the significant infrastructure enhancement pursuant to User Funding Agreements.

During the negotiation of the User Funding Agreements the nature and extent of the Applicant's involvement in the design construction and procurement aspects of the project delivery must be subject to a reasonable balance between QR Network's legitimate business interests and those of the access seeker (Applicant).

In this context, where Applicant's consider QR Network is not acting reasonably in relation to the timeframe for the project to be completed or the prudence of the costs likely to be incurred then the Applicants may refer the matter to dispute resolution. The degree of the Applicant's involvement may extend to industry undertaking most or all aspects of project delivery where this represents an appropriate balance of interests.

QR Network acknowledges that dispute resolution should be completed within reasonable timeframes so as to not unreasonably delay the construction of the Infrastructure Enhancement. In this regard QR Network has modified the dispute resolution process from that in 10.1 of the Undertaking to limit dispute resolution to an expert determination. The dispute may then only be referred to the QCA where the decision by the expert is in manifest error.

Consistent with the requirements of s.118 and s.119 of the QCA Act the User Funding Agreements must be consistent with the following principles:

- QR Network must not be commercially disadvantaged as a consequence of the infrastructure enhancement. In this regard, QR Network must not incur any costs associated with the investment such that it is no worse off than if the infrastructure enhancement is not undertaken.
- A contributor must have a direct interest in the use of the Access Rights to be created. A Contributor may therefore be an Coal Producer, Operator or Port Service Provider;
- The User Funding Agreement will provide for the return to the Contributor payments relating to capital return component relating to the contributed assets included in access revenues. This is similar to the process which currently occurs with the existing Access Facilitation Deeds;
- QR Network will be entitled to recover fees in relation to providing Railway Manager services associated with the infrastructure enhancements undertaken pursuant to a User Funding Agreement; and

- All infrastructure enhancements undertaken pursuant to a User Funding Agreement remain owned and operated by QR Network.

QR Network also acknowledges that the Contributor retains some rights with the funded infrastructure enhancements. These rights include:

- the right of first refusal to capacity created by those enhancements. The capacity created by User Funding Agreements will be deemed committed capacity. Currently, capacity renewal rights are limited to existing mine life or a replacement mine. The right of first refusal would permit the Contributor to allocate that committed capacity to a substitute mine which would also utilise the access rights associated with that committed capacity (subject to a capacity assessment); and
- the capacity rights created by the enhancement and any corresponding rights are transferrable to another Access Seeker.

QR Network also proposes to be entitled to earn a management fee in the performance of Railway Manager services relating to infrastructure enhancements funded by User Funding Agreements. In this regard, the fee will be commensurate with regulatory and commercial risks of providing the relevant train services. For example, as QR Network proposes to recover operating and maintenance costs through regulatory approved access charges it will bear commercial and regulatory risk on assets for which it obtains no economic return. The effect of User-Funded Investment increases QR Network's commercial and regulatory risk against a smaller capital base. These risks include but are not limited to:

- liabilities and losses arising from the provision of access;
- asymmetric risks;
- misalignment between actual operating and maintenance costs with regulatory allowances; and
- performance risk in regard to revenue cap and incentive regimes.

This effect is evident in Figure 1.1 below which shows the expected return distribution with and without User Funded contributions. The left hand tail of the distribution is not affected by the contribution as the framework exposes the contributor to same asset stranding and optimisation risks as QR Network would have been if it had funded the asset. Where the contributed assets are optimised

from the Regulatory Asset Base there will be no access revenue attributable to the User Funding enhancements and therefore no obligation to pay a rebate to the contributor.

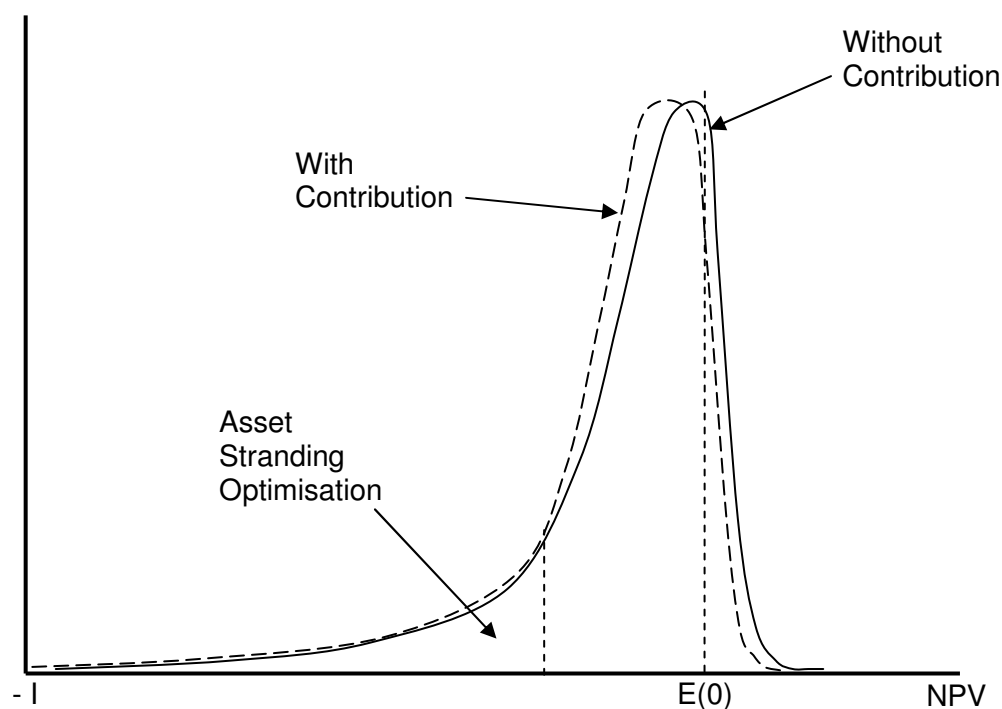


Figure 1.1 Expected Return Distributions of Regulated Assets

QR Network notes that regulatory frameworks have provided for recovery of management fees on contributed assets. For example, the Victorian Freight Network Pricing Order 2001⁹ provides for an allowable margin of 10% on operating and maintenance costs on contributed assets or other amounts as determined by the regulator. QR Network considers that identifying and allocating costs to specific contributed assets would involve a degree of administrative complexity and may be better managed through an overall management fee.

The QCA's has also previously recognised management fees in approving a 3% margin in relation to the operating costs approved in the 2006 Envestra Gas Distribution decision¹⁰. QR Network notes that based on the relative proportion of operating costs for regulated businesses the margin on operating and maintenance

⁹ <http://www.gazette.vic.gov.au/gazette/Gazettes2001/GG2001S070.pdf>

¹⁰ http://www.qca.org.au/files/Revised%20Access%20Arrangement_Envestra_Final%20May06.pdf

costs and overall management fees are reasonably equivalent as shown in Table 1.1.

Table 1.1 Services Margin and Management Fee Equivalence

Indicative Management Fee		
A)	Operating Cost Percentage	28%
B)	Services Margin	10%
C)	Access Charge	\$ 4.00
D)	Operation Costs (C x A)	\$ 1.12
E)	Margin (D x B)	\$ 0.11
Management Fee (E ÷ C)		2.8%

1.9.7 Conclusion

QR Network considers the capacity expansion framework included in this draft access undertaking provides an appropriate balance between QR Network's legitimate commercial interest, the interest of Access Seekers and the stakeholders who are dependent on the declared service. It is also our view that the framework has addressed all material concerns and issues raised by Stakeholders in response to the draft decision and the recommendations made by the ACCC in the consideration of similar provision in the HVAU.

The framework proposed by QR Network is also consistent with the requirement that the service provider not be required to bear part or all of the costs of providing the additional as required under:

- Part 5 of the QCA Act;
- Part IIIA of the Trade Practices Act; and
- Draft access regimes being developed of access to the Pilbara rail networks.

The framework provides for timely investment, a structured consultation process and exit triggers while meeting the intent of the 6.4 of the Competition Principles Agreement which seeks to promote negotiation between an Access Seeker and an Access Provider in the first instance but provides the protection of dispute resolution.

2 MATERIAL FROM QCA DRAFT DECISION THAT QR NETWORK DOES NOT ACCEPT OR REPRESENTS A MATERIAL DIFFERENCE TO THE 2009 DAU

2.1 INTRODUCTION

This section outlines non-pricing policy issues that:

- QR Network does not agree with in the QCA's draft decision and believe that there is still some divergence of opinion between itself and the QCA;
- QR Network does agree; or
- Represent a material difference in the QR Network's proposed position in the draft 2009 Access Undertaking.

These issues are:

- The requirement to provide Audited General Purpose Financial Statements
- System Rules
- Decision Making Audit process
- Definition of Reduction Factor
- Capacity Notification Register
- Review of Rail Infrastructure

Further information in support of QR Network's case on these matters is provided below.

2.2 REQUIREMENT TO PROVIDE AUDITED GENERAL PURPOSE FINANCIAL STATEMENTS

QR Network's response to the draft decision rejected decisions 3.7 (and 3.8). QR Network rejected these decisions on the basis:

- The QCA decision-making did not demonstrate the purpose or reasoning for the decision against the decision making criteria in the Part 5 of the QCA Act;

- There was no substantial change in the commercial relationship between QR Network and its parent company to trigger an obligation to prepare general purpose financial statements;
- The decision would impose material auditing and accounting costs and obligations on QR Network above its current statutory obligations; and
- There is no regulatory precedent where such obligations have been imposed.

In addition, QR Network also notes the decision does not reflect the intent of section 159 of the QCA Act which requires the QCA to have regard to the businesses accounting arrangements when developing its Costing Manual.

Accordingly, QR Network's reaffirms its rejection of the requirement to prepare general purpose financial statements and retains this submission retains the drafting in the 2009AU.

2.3 SYSTEM RULES

QR Network proposed the introduction of System Rules in its 2009 DAU. These rules were seen as more detailed explanation of the Network Management Principles (NMP) contained in Schedule G of the Access Undertaking. QR Network envisaged that these rules would be discussed and agreed, if required, between itself and Operators in a coal system in order to improve system operation and efficiency.

In response to the QCA's Draft Decision it became evident that industry participants sought some clarity about the process required to create the system rules. To this extent QR Network has amended its position on the creation of initial system rules but will limit this to the Goonyella System in the first instance. It accepts the QCA's requirement to run a public consultation process which will provide transparency to all parties about the impacts of system rules on the operation of a coal system.

The System Rules are not a replacement of the NMP nor are they a replacement for the contracts for capacity held between QR Network and Access Holders. Given this, the System Rules can not alter a term in an Access Agreement without the permission of an Access Holder. Further, QR Network could be liable for the payment of compensation to an affected party if it does alter terms in an Agreement to align with System Rules.

Where the supply chain believes that a change to the System Rules is required to ensure the ongoing efficiency of a coal system, and this requires QR Network to change a condition in an Access Holders Access Agreement, QR Network has included a mechanism that would allow it to recoup the compensation amount by including this in the building blocks for future reference tariff calculation.

2.4 DECISION MAKING AUDIT PROCESS

QR Network accepts in full the QCA's Draft Decision on the reinstatement of the decision making principles and associated audit provisions. This represents a significant departure from QR Network's position in the 2009 DAU.

The 2008 Undertaking required that QR Network comply with certain principles when making decisions which materially affect an Access Seeker's or Access Holder's rights. QR Network removed these principles from the 2009 DAU because QR Network had become an independent entity through the establishment of QR Network as a separate subsidiary within the QR portfolio.

Whilst QR Network accepts these general principles about how it manages the provision of Access, it considered that the inclusion of these obligations in the 2009 DAU was unnecessary.

QR Network believed that retaining the Decision Making Audit Process imposed a level of regulatory burden given prior experience, that is, no issues have been raised by any Access Seeker, nor any issues identified during an audit process, regarding QR Network's compliance with these decision making principles.

Industry responses to QR Network's proposal raised concern about the ability of Access Holders and Access Seekers to be able to ensure that they were being treated equitably during the negotiation of Access Rights. Further, that the removal of the audit process associated with the Decision Making process did not provide them with comfort that QR Network would continue to act fairly in making decisions.

In assessing this process and stakeholder concerns, QR Network has re-evaluated its position and will now revert to the mechanisms included in the 2008 Undertaking. This includes the reinstatement of the Decision Making principles and the Decision Making Audit process.

2.5 DEFINITION OF REDUCTION FACTOR

It has come to QR Network's attention that transfer fees calculated under the 2005 and 2008 Undertakings and UT2 agreements may give rise to a transfer fee which materially exceeds the net difference in the present value of the take-or-pay between the original and the new service. This outcome is a legacy from the price-cap and take-or-pay arrangements and was not addressed in the development of the revenue cap arrangements.

QR Network has previously communicated this issue to stakeholders and proposes to address the deficiency in the capacity management framework by modifying the reduction factor to reflect the ratio of the take-or-pay exposure between the original and new service. When included in the calculation of the relinquishment fee formula this formula algebraically collapses to the desired outcome. This is shown in the following equations.

$$\begin{aligned} \text{Transfer_Fee} &= PV(\text{ToP})_A - (PV(\text{ToP})_A \times \text{Reduction_Factor}) \\ &\text{where} \\ \text{Reduction_Factor} &= PV(\text{ToP})_B / PV(\text{ToP})_A \\ &\text{therefore} \\ \text{Transfer_Fee} &= PV(\text{ToP})_A - (PV(\text{ToP})_A \times [PV(\text{ToP})_B / PV(\text{ToP})_A]) \\ &= PV(\text{ToP})_A - PV(\text{ToP})_B \end{aligned} \tag{1}$$

The amended reduction factor will only apply to transfers of nominated access rights where the old and new rights operate predominantly within the same system. This is to ensure that where transfers involve different systems (i.e. transfer of access rights from the Moura System to the Blackwater System) continue to reflect the resultant differences in contribution to common costs and not leave users within the original system materially disadvantaged as a consequence of the transfer. Accordingly, the existing reduction factor will continue to apply to the calculation of relinquishment fees in these circumstances.

QR Network also notes that where a reference tariff includes a system premium the revised reduction factor will always give rise to a positive transfer fee where the other party pays the system price. The annual volume reset would also increase the quantum of the system premium to reflect the reduction in train services. As a

consequence a mine subject to a system premium would be required to pay twice. To address this anomaly QR Network proposes to include drafting which provides for the quantum of the transfer fee to be adjusted to reflect any consequential variations in the system premium which would arise as a consequence of the transfer.

QR Network has included detailed drafting in the 2010 DAU to reflect this change. QR Network also notes the delivered outcomes from these amendments will replicate the transfer outcomes proposed in the ARTC Hunter Valley Access Undertaking.

2.6 CAPACITY NOTIFICATION REGISTER

QR Network proposed the creation of a Capacity Notification Register which would enable Access Seekers who were not able to currently obtain Access Rights could be placed in order to inform future capacity allocation. The effect of this register is that it works similar to a queue for future capacity, with the right to negotiate capacity based on the date the original non-successful application for access was made.

In the 2010 DAU QR Network is proposing to amend the operation of the CNR and add a requirement that Access Seekers must provide written confirmation of complimentary port queuing arrangements for the same tonnage for which they are requesting rail access. Further, they will be required to provide this information to QR Network every six (6) months in order to remain on the CNR. This will ensure applications for access are not spurious and expedite the capacity allocation process when capacity becomes available.

It has become apparent to QR Network that the introduction of a Capacity Notification Register, if implemented in the way that was initially intended by QR Network when this was first mooted in September 2008, would promote gaming by coal customers. QR Network is certain that if its amendments are not accepted by the QCA that it will receive a large number of unsubstantiated capacity requests during the first month of the 2009 Undertaking period. QR Network firmly believes that this defeats the purpose of the CNR.

QR Network's amendments will ensure that the CNR only contains customers who have taken genuine steps to obtain capacity with a Port.

2.7 REVIEW OF RAIL INFRASTRUCTURE

UT2 includes provisions which require QR Network to obtain rail transport infrastructure from a related QR Party where that infrastructure is necessary to provide the declared service (the transportation by rail using rail transport infrastructure).

It is QR Network's view that the assets which it owns includes all rail transport infrastructure as defined in the Transport Infrastructure Act and as a consequence such provisions are not necessary for inclusion in the Access Undertaking. Where an Access Seeker is of the view that a related QR Party owns or operates rail transport infrastructure that the Access Seekers deems necessary to undertake a declared service, that party may seek to negotiate access directly with the QR Related Party.

While the relevant QR Related Party could provide an access undertaking or the QCA could seek an Access Undertaking, such actions would be a significant waste of public and private resources and therefore not in the public interest. However, QR Network does acknowledge that the QCA Act does not place restrictions on the circumstances with which the QCA could seek a Draft Access Undertaking.

QR Network understands that stakeholder concerns are associated with the potential for QR Network to avoid coverage under the scope of the Access Undertaking by undertaking new investments through an alternate vehicle. While QR Network considers such conduct to be impractical and myopic with respect to alternate pathways to access, QR Network is prepared to reinstate the rail transport infrastructure transfer provisions with the following amendments:

- Where the believed rail transport infrastructure is not required for the direct running of a train from an origin to a destination, QR Network will only agree to the transfer where the services to be provided by the facility have been deemed to satisfy the requirements for declaration under s.76(2) of the QCA Act; and
- All costs associated with rail transport infrastructure, including initial and ongoing incremental costs and any costs arising from the transfer (i.e. taxes, duties, legal costs) must be included in the relevant System Allowable

Revenue and the rail transport infrastructure included in the Regulatory Asset Base.

The first restriction relates to rail infrastructure which does not clearly fall within the definition of rail transport infrastructure or other rail infrastructure. This is a deficiency associated with the reliance on definitions in the Transport Infrastructure Act. This is primarily associated with yards and provisioning which QR Network notes are predominantly operator owned and managed in other regulatory frameworks in Australia.

QR Network's response to the draft decision noted that the existing framework does not sufficiently address the consequential effects of the transfer of asset ownership. A fundamental basis for the removal of the transfer provisions was the issue of tax liabilities which may arise on the transfer of ownership between two separate legal entities. The 2008 Queensland Rail Restructure Regulation provided a 12 month window for variations in the respective asset registers without tax consequence. Accordingly, QR Network was reasonably satisfied that a potential tax impost would not arise during the period of approval and termination of UT2.

QR Network notes that the transactional and regulatory complexity associated with the transfer of rail infrastructure from a QR Related Party to QR Network is likely to be substantially more resource intensive and onerous than a negotiated or arbitrated outcome directly between the Access Seeker and the QR Related Party. The transfer may also need to deal with compensation or liabilities which may arise to third parties who have commercial agreements associated with the nominated facilities. Accordingly, QR Network questions the efficacy of the review of rail infrastructure provisions but will include them in the 2010 DAU.

2.8 INCENTIVE MECHANISM

2.8.1 Revenue Cap Adjustment Provisions

Concerns have previously been expressed by QR Network and other stakeholders regarding the perceived effectiveness of the 2% volume 'incentive'. One of QR Network's main concerns is the difficulties in demonstrating the basis for such a claim, given the interdependencies between the various interfaces within the supply chain and the contribution of all parties to supply chain performance. In view of these

complexities the costs of pursuing a claim through the QCA are likely to be high. QR Network had therefore proposed to place the onus of proof on a non-QR Network party to show that QR Network had not contributed to an increase in volumes. This proposal has been rejected by the QCA.

The difficulties in designing an effective mechanism have previously been highlighted. As outlined above, these difficulties arise given the inherent complexity in delineating the specific contribution that each party makes to performance (particularly if this needs to be quantified). Nonetheless, the QCA's draft decision proposed that QR Network would develop a revised mechanism within six months of the commencement of the 2009 Undertaking.

At a first principle level the nature of QR Network's vertical integration provides strong incentives for maximising network availability and improving supply chain throughput. Stakeholders also indirectly made acknowledged this incentive when expressing concerns regarding the vertically integrated model. Nevertheless, QR Network does recognise it is a separate legal entity and it has its own role to play in improving supply chain performance and meeting the needs and aspirations of supply chain participants.

QR Network therefore proposes to accept the QCA's decision to develop a draft incentive mechanism in consultation with supply chain participants following the approval of the 2009 Undertaking. However, QR Network considers the 6 month timeframe suggested by the QCA does not provide sufficient time to adequately consider the complexities of designing the incentive mechanism and has included an alternate obligation to submit a draft incentive mechanism to the QCA for consultation 12 months after the date of approval.

QR Network has also placed some constraints around the outcomes from the draft incentive mechanism in recognition of the limitation on QR Network relative to other supply chain participants in influencing supply chain performance. Accordingly, the incentive mechanism must operate in a symmetrical manner such that there is a reasonable probability of balancing the upside revenue outcomes against downside revenue outcomes and the mechanism must not place more than 5% percent of System Allowable Revenue at risk.

The focus of the inventive framework must be on outcomes for the supply chain and not in regard to individual origin to destinations. QR Network notes that any remedies for non-performance at an individual origin to destination must be managed by the relevant Access Agreement and not the regulatory framework. In addition, QR Network has previously expressed concerns regarding the interplay between the QCA arbitrating claims for breach or negligence and the treatment of breach or negligence under the Access Agreement (which is a legal mechanism). The potential costs of responding to and defending claims could be significant for both parties. The application of such a test on an origin-destination level has the potential to supplant the contractual mechanism, which should remain the primary mechanism for dealing with breach or negligence claims. This will therefore also allow parties to transfer the costs of pursuing breach or negligence to the QCA. This not only passes these costs onto the regulator but also provides parties with an incentive to pursue unsubstantiated claims. QR Network would have implemented different contractual provisions if it was intended to assess claims at this level.

Accordingly, QR Network does not propose to accept the QCA's proposed transitional mechanism of breach or negligence on the basis of origin to destination and has proposed the application of system test which is based on a system threshold of 4%. As indicated in our response to the draft decision the level of train services under this threshold is lower than that attributable to 10% of the aggregate train services under the largest agreement (UT1) in any given system. Accordingly, the threshold is lower than applied in UT2. It is also at a reasonably sufficient level that would allow stakeholders to readily identify contributing factors which could warrant a reduction in the system allowable revenues.

QR Network has also sought to balance the downside system performance threshold by reinstating the 2% upside increment provisions from the 2008 Undertaking.

2.8.2 Transmission Network Charge Wash-up

The QCA proposed drafting in Appendix 4 of the draft decision extends the annual 'wash-up' process to be inclusive of transmission and distribution network charges. While QR Network's original 2009DAU did not seek to specifically include these costs QR Network considers the inclusion of these costs in the wash-up process addresses a number of deficiencies in regards to conflicting incentives for transmission costs.

Transmission and distribution network usage charges include variable cost components which are determined based on the energy demand profile at the relevant connection point. As indicated in QR Network's 2009DAU, the variables associated with the energy demand (i.e. fleet operational decisions, driver behaviour and temperature) are exogenous to QR Network and there is no ability to influence or control the level of energy demand from a particular connection point.

However, all costs associated with network charges are included in the AT5 tariff component which is subject to a revenue cap. The interaction of the variable costs and the revenue cap could incentivise QR Network to limit the electric gross tonne kilometres within a network to avoid financial losses. The interaction between the forecast and actual costs for transmission with the revenue cap adjustment amounts is shown in Figure 2.1.

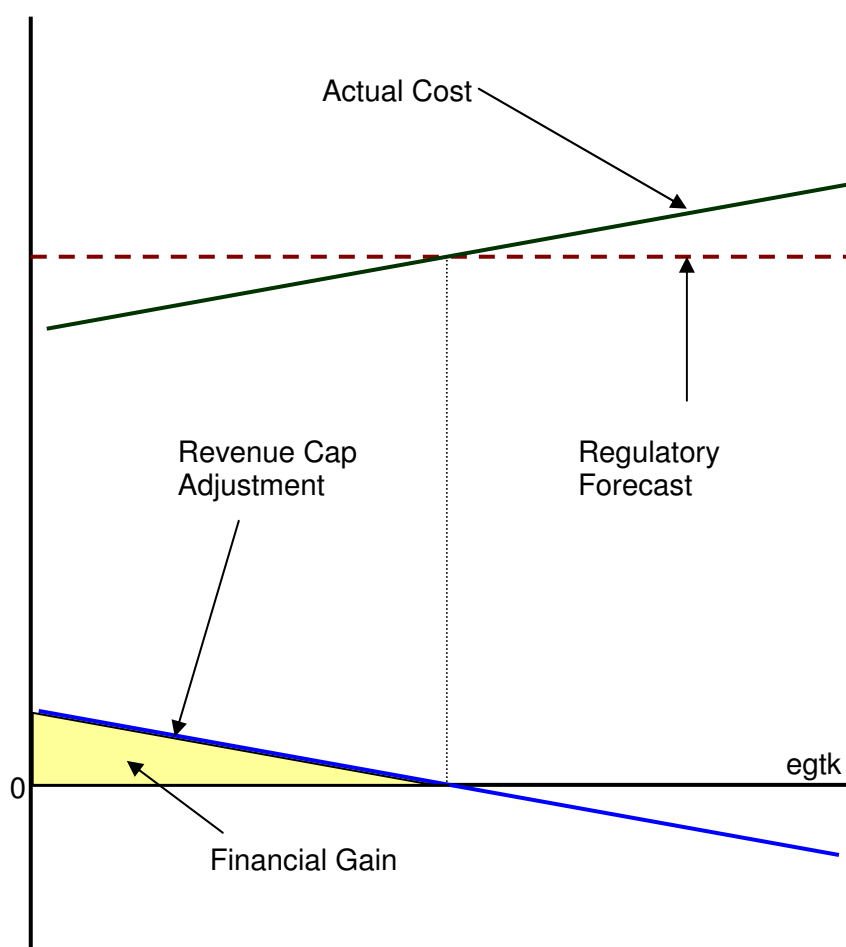


Figure 2.1 Revenue Cap Adjustments and Electricity Transmission/Distribution Costs

This negative volume incentive was noted by the QRC in its submission the QCA's Issues Paper¹¹. This incentive does not align with intent of promoting efficient investment and utilisation of rail transport infrastructure. As indicated in section 4 of this submission each connection point is subject to at least five different price components, This gives rise to considerable complexity in terms of managing compliance with respect to 2.5% variation in transmission pricing.

QR Network therefore believes that a full cost pass through (as is currently intended with the endorsed variation event) on this cost component coupled with a wash-up process similar to the wash-up on electricity supply costs would represent the most efficient way to deal with these costs and also minimise any revenue cap adjustment.

If QR Network had the ability to influence transmission costs, it would be in its best interest to minimise the number of electric trains running on a system to reduce electricity load charges. This action is in direct contrast to the actions that coal customers would be expecting, as they would seek to have more efficient electric trains running on an electrified system to deliver higher coal throughput. This is an example of the perverse outcomes that could be achieved with an incentive framework that is not fully considered and developed with relevant supply chain participants

¹¹ QRC - Submission in response to QR Network's 2009 Draft Access Undertaking (November 2008), pg 51

3 DRAFT DECISIONS ACCEPTED BY QR NETWORK

Table 3.1 below shows the decisions that QR Network has accepted from the QCA's draft decision. These have either been accepted in full, accepted with alternate drafting or further discussion has been undertaken with the QCA to come to an in-principle agreement. This table outlines the relevant clause in the Undertaking drafting, the issue, the QCA decision number within the draft decision and the basis for acceptance.

The "Basis for acceptance" column in the table is categorised as follows:

- Accept DD – Means drafting that has been modified based on full acceptance of the Draft Decision or acceptance with only very minor amendments.
- Accept DD with alternate drafting – Means drafting that has been modified based on a general acceptance of the Draft Decision or its intent, but with drafting that QR Network believes better meets this intent or could be improved.

Further detail about the precise change to each clause within the Undertaking has been included in Volume 2 – detailed drafting changes.

Table 3.1: Decisions accepted by QR Network

Clause	Issue	QCA draft decision reference	Basis for Acceptance
2.3	Intent of Undertaking	2.4	Accept DD with alternate drafting
2.4, 3.7.2	Scope of Undertaking	2.1-2.3	Accept DD
Part 12	Early Termination Triggers	2.5	Accept DD
3.1	Major Yards review	3.6	Accept DD
3.3	Confidentiality Deed	3.2	Accept DD
3.3.2	Provision of deed/undertaking by QR parties	3.3	Accept DD
3.4	Decision Making Principles	3.1	Accept DD
3.5	Complaints handling on breach of confidentiality deed	3.4	Accept DD
3.6	Audit of Decision Making	3.1	Accept DD
3.7.2	Provision of Access to Rail Transport Infrastructure	2.2	Accept DD with alternate drafting
Part 12	Major Yards definition	3.5	Accept DD
4.2	Rejection of Access Application	4.5	Accept DD
4.3	Extension of IAP period	4.6	Accept DD
4.3	Capacity Modelling Assumptions	4.7	Accept DD with alternate drafting
4.5	Negotiation ceasing on reduction of capacity	4.8	Accept DD
4.7, Part 12	Capacity Notification Register	4.9-4.11	Accept DD with alternate drafting
Part 12	Major Projects Definition	4.2	Accept DD
5.2	Development of alternate form of agreement	5.3	Accept DD
5.2	Withdrawal of Standard Access Agreements	5.7	Accept DD

Clause	Issue	QCA draft decision reference	Basis for Acceptance
5.3	Access Agreements for new or renewed train services	5.6	Accept DD
Volume 2	Reinstatement of Standard Access Agreement	5.1	Accept DD
Schedule E	Liability for the carriage of dangerous goods	5.4	Accept DD
6.1.3	Price Differentiation	6.1	Accept DD
6.4.2	Private Infrastructure	6.2	Accept DD with alternate drafting
6.4.4	MCI: interim review	6.19	Accept DD with alternate drafting
6.5.2	Sharing of Responsibility	6.6	Accept DD with alternate drafting
6.5.2	Major Projects Deeming	6.5	Accept DD
Part 12	Major Projects Definition	6.4	Accept DD
7.1	Initial System Rules	7.1	Accept DD with alternate drafting
7.3, part 12	Competing Applications	7.6, 7.7	Accept DD
7.3.4	Reordering of queue for capacity	7.17	Accept DD
7.3.5	Capacity Resumption	7.5	Accept DD
7.3.6	Relinquishment Fee Definition	7.13	Accept DD
7.3.6	Definition movements	7.15	Accept DD
7.3.7	Capacity Initiated Transfers	7.9	Accept DD
7.4	First right of refusal on renewal	7.10	Accept DD
7.4	Early Notification of renewal	7.11	Accept DD
Part 12	System Path Definition	7.3	Accept DD
Part 12	Intermediate Train Path Definition	7.4	Accept DD

Clause	Issue	QCA draft decision reference	Basis for Acceptance
Part 12	Renewal Application Definition	7.12	Accept DD
Schedule G, Appendix 1	System Rules Amendment	7.2	Accept DD
Various	End user can be an access seeker	7.8	Accept DD
8.1.2	IRMP publication on website	8.2	Accept DD
Various	Alignment of Schedule references	8.3	Accept DD
9.1, 9.2.2, 9.2.3, 9.2.4	Quarterly Performance Report/ Public Maintenance Report	9.1	Accept DD
9.2.3	Maintenance cost index reporting	9.2	Accept DD with alternate drafting
9.6	Responsibility Statement	9.3	Accept DD
Part 11	Whole of coal chain initiatives	10.8	Accept DD
11.2.1, Appendix A, 3.2.2	Master Plan and Stakeholder Consultation	10.7	Accept DD with alternate drafting
Schedule A	Asset Management Plan Reference	10.3	Accept DD
Schedule A, 2.5	Early works expenditure and the RAB	10.5	Accept DD
Schedule A, 3.1.3	Procurement Strategy	10.6	Accept DD with alternate drafting
Schedule A, Clause 4(d)	Carryover discount consequential amendment	10.2	Accept DD
Part 12	Removal of definition of carryover discount rate	10.1	Accept DD

Clause	Issue	QCA draft decision reference	Basis for Acceptance
Various	References to replacement capital	10.4	Accept DD
Schedule F, Part A, 2.2.1, 2.2.7. Part 12	Review event for maintenance scope change	6.22	Accept DD
Schedule F, Part A, 3.2	Variations to Reference Train Service	1.1, 6.23	Accept DD
Schedule F, Part B, 3.1.2	Annual review process: timing	6.15	Accept DD
Schedule F, Part B, 3.2.2	MCI: application	6.20	Accept DD with alternate drafting
Schedule F, Part B, 4.2, 4.1.3, 4.1.4	Treatment of cross system traffics	6.8	Accept DD with alternate drafting
Schedule F, Part B, 4.3	Non-reference tariffs	6.17	Accept DD with alternate drafting
Schedule F, Part B, 5.4(a) & 6.4(a)	Pricing for Electric Trains	6.9	Accept DD
Schedule F, Part C, 3.5	Western System reference tariff	1.8	Accept DD
Part 12	MCI: composition	6.18	Accept DD with alternate drafting

4 REFERENCE TARIFFS

4.1 INTRODUCTION

This section includes discussion on matters relevant to the determination of Reference Tariffs for coal carrying train services in the Central Queensland Coal Region and the Western System. Specifically, it includes:

- The building block inputs for relevant tariffs;
- Additional supporting information where relevant; and
- Summary tables of Annual Revenue Requirements and Reference Tariffs

4.2 QCA DRAFT DECISIONS THAT QR NETWORK DOES NOT ACCEPT

QR Network's response to the draft decision accepted a large number of the pricing related decisions. However, QR Network does not support the following decisions:

- Determination of the risk free rate and debt risk premium with reference to a 5 year maturity;
- Determining the equity beta subject to an asset Beta of 0.45;
- reduction in maintenance costs resulting from the benchmarking of ballast undercutting task with the Hunter Valley; and
- the determination of maintenance costs without inclusion of appropriate amounts for overhead, working capital and contingency and incentives while not providing an appropriate return on capital for invested maintenance assets.

Discussion of these matters and the key inputs to the reference tariffs are provided below.

4.3 REFERENCE TARIFF COMPONENTS AND CALCULATION – CENTRAL QUEENSLAND COAL REGION

4.3.1 Weighted Average Cost of Capital

QR Network's response to the position adopted by the QCA on inputs to the weighted average cost of capital (WACC) expressed concern regarding the departure from established regulatory precedent and the resultant incentives to invest. QR Network accepted the QCA's decision on many of the WACC parameters as they were consistent with regulatory precedent and QR Network is not able to present any new evidence which may warrant a departure from those precedents. However, QR Network rejected the QCA position to:

- Adopt a five year term for estimating the risk free rate and the debt risk premium; and
- Reduce the asset beta from 0.5 (UT2) to 0.45.

It is widely acknowledged that the estimation of the cost of equity is associated with a substantial degree of statistical uncertainty. That uncertainty is increased by the absence of pure play comparators to empirically determine a reliable asset beta. As a consequence, the regulator exercises some discretion in terms of its consideration of qualitative information in exercising its judgement. Accordingly, the exercising of this judgement can lead to regulatory error and consequential impacts on incentives to invest.

Regulatory risk and as a consequence the firm's ability to attract capital to finance its existing and growth activities is intrinsically linked to the predictability of regulatory outcomes. Therefore, any material departures from regulatory precedent can increase the funding costs to the regulated firm as this increases perceived regulatory risk and hence the risk premium required by investors (it could also have a detrimental impact on their willingness to provide funds to a regulated business) . In this regard, QR Network notes that since the QCA's release of the draft decision the following information has become available:

- the Australian Competition and Consumer Commission (ACCC) Draft Decision on the Australian Rail Track Corporation draft access undertaking on the Hunter Valley Access Undertaking (the HVAU draft decision); and
- the lodgement of the draft access undertaking for the Dalrymple Bay Coal Terminal.

In reviewing aspects of these documents and supporting material relating to the WACC it is evident the QCA's draft decision reflects a material variation to the positions in these documents. QR Network will need to obtain its funding from competitive markets. The WACC proposed by the QCA in the draft decision places QR Network at a competitive disadvantage in obtaining funding from capital markets.

In reducing the proposed asset beta the QCA has indicated it has had regard to the additional risk mitigation measures that QR Network has sought in UT3 relative to UT2. In this regard, the risk-reward relativity of the ACCC decision and the User agreed 'package' in the proposed DBCT Draft Access Undertaking does not reconcile with the QCA's decision. This is explored in greater detail in the following sections.

As indicated in our response to the draft decision QR Network maintains that:

- the appropriate term for determining the risk free rate and the debt risk premium remains 10 years; and
- its asset beta range of between 0.5 and 0.6 is reasonable.

For the avoidance of doubt QR Network's response to the draft decision and supporting attachment form part of this resubmission.

4.3.2 Market Averaging Period

On 1 December 2009 QR Network requested the QCA approve a nominated market averaging period for estimating the risk free rate and the debt risk premium over a 20 day period commencing from 27 January 2010. In order to assist avoiding signalling refinancing activities associated with QR Network's debt portfolio QR Network requested the QCA confirm its acceptance of the nominated market averaging period on a confidential basis.

The QCA advised QR Network on 18 December 2009 of its acceptance of the nominated averaging period. Accordingly the risk free rate and the debt risk premium have been determined with reference to the 20 business days commencing 27 January 2010.

4.3.3 Risk Free Rate

The draft decision determined the risk free rate and the debt risk premium with reference to a five year term. QR Network rejects this approach and maintains that the established regulatory precedent and accepted financial market practice of setting the costs of equity with reference to Commonwealth Government Bonds with a maturity of 10 years should be retained.

In making its decision the QCA has assumed that QR Network can manage the risks that its decision creates by borrowing for the length of the regulatory period. First, this exposes the business to refinancing risk. Second, the regulatory regime should not drive QR Network's funding decisions. Instead, it should complement the efficient and prudent commercial practice of an efficient benchmark firm.

QR Network notes that its position is strongly supported by submissions from Queensland Treasury and the Queensland Treasury Corporation.

The QCA will be the only Australian regulator to apply a five year risk-free rate, noting that in 2003 the Australian Competition Tribunal overturned a decision by the ACCC to apply a five year risk-free rate. The AER also recently reversed its own decision to apply a five year risk-free rate as it recognised that this would expose the regulated businesses to refinancing risk.

The prevailing annualised risk free rate for 10 year Commonwealth Government Securities over the nominated averaging period is 5.60%.

4.3.4 Cost of Debt

In reaching its decision on the cost of debt the QCA considered the issue of the divergence in Bloomberg and CBA Spectrum data services which occurred during the Global Financial Crisis. The QCA concluded that at the time of its decision making the yields estimated by each service had recently converged and that these issues have largely gone away.

However, as indicated in the report prepared by CEG and attached to QR Network's response to the draft decision the continued liquidity issues in the corporate bond market has limited the term for BBB Bloomberg fair value yields to seven years.

As QR Network has determined the risk free rate with reference to a ten year term it is also necessary to establish the debt risk premium based on the benchmark cost of debt for ten year BBB+ securities.

In its report, CEG has examined the issues associated with estimating the cost of debt and considers that applying a method that tests which of the alternative service providers produces the 'best' fair value estimate is important. The AER has now implemented such a methodology although the results remain inconclusive. CEG has proposed some additional information that could be used with this method, and concluded that Bloomberg has the best fit for ten year BBB+ debt. As the sample period used to undertake this assessment is not far removed from the nominated averaging period QR Network proposes to use Bloomberg data series in estimating the cost of debt.

The ACCC in its HVAU draft decision¹² indicated that its approach to estimating the cost of debt was to:

- take the longest maturity BBB bond fair yield estimate available from Bloomberg; and

¹² ACCC (2010) Hunter Valley Coal Network Access Undertaking – Draft Decision, p. 543. 5 March

<http://www.accc.gov.au/content/item.phtml?itemId=917323&nodeId=0e764bff0915d7acab5285d063adace4&fn=Draft%20Decision%205%20March%202010.pdf>

- add to this an estimate of the term premium going from the maturity of the longest dated BBB bond out to ten years as estimated from the next (higher) credit rating Bloomberg fair value yield curve quoted out to at least ten years.

QR Network notes that this process is consistent with the methodology proposed in its September 2008 submission. The published Bloomberg series with the longest term for BBB securities is seven years. Accordingly, QR Network has established the annualised cost of debt for BBB+ securities over the nominated averaging period using the following methodology.

$$\text{BBB}^+ \text{ 10 yr Bloomberg Fair Value Yield} = \text{BBB 7 yr Bloomberg Fair Value Yield} + \text{AAA 10 yr Bloomberg Fair Value Yield} - \text{AAA 7 yr Bloomberg Fair Value Yield}$$

Consistent with the approach taken by the Australian Energy Regulator, the estimated yield for BBB+ securities is determined with reference to BBB bond fair value yields. This approach is reasonable on the basis that:

- Bloomberg's BBB curve is intended to cover BBB- to BBB+; and
- the bonds that are used to construct the Bloomberg BBB curve tend to be overwhelmingly BBB+ rated.

In addition, we are advised by CEG that the 'test' (such as that used in the Report provided in response to the draft decision) applied to determine which of Bloomberg BBB and CBASpectrum BBB+ is a better proxy for BBB+ fair value is carried out using only yields on BBB+ bonds.

Applying the methodology described above over the nominated averaging period produces an annualised cost of debt of 10.04% as shown in Table 4.1. **Deducting the annualised risk free rate from the cost of debt over the same period obtains a debt risk premium of 4.45%.**

Table 4.1 Determination of the Cost of Debt for yield on 10 Yr BBB+ Securities

Date	BBB 7yr C3567Y Index	AAA 7yr C3577Y Index	AAA 10yr C35710Y Index	BBB+ 10 yr Resultant
27-Jan-10	9.168	6.605	7.173	9.737
28-Jan-10	9.229	6.675	7.244	9.798
29-Jan-10	9.206	6.621	7.203	9.788
01-Feb-10	9.165	6.620	7.206	9.751
02-Feb-10	9.201	6.622	7.243	9.822
03-Feb-10	9.134	6.585	7.215	9.764
04-Feb-10	9.090	6.602	7.223	9.711
05-Feb-10	9.030	6.543	7.165	9.653
08-Feb-10	9.131	6.549	7.184	9.766
09-Feb-10	9.111	6.512	7.138	9.737
10-Feb-10	9.138	6.574	7.193	9.757
11-Feb-10	9.228	6.621	7.228	9.834
12-Feb-10	9.278	6.661	7.262	9.879
15-Feb-10	9.257	6.649	7.250	9.858
16-Feb-10	9.272	6.667	7.268	9.873
17-Feb-10	9.253	6.650	7.244	9.848
18-Feb-10	9.258	6.660	7.258	9.857
19-Feb-10	9.284	6.686	7.283	9.881
22-Feb-10	9.288	6.689	7.287	9.885
23-Feb-10	9.295	6.702	7.300	9.893
Average				9.804
Annualised				10.04%

4.3.5 Asset Beta / Equity Beta

The QCA's draft decision proposed to reduce QR Network's asset beta from 0.5 (as applied in UT2) to 0.45, the rationale being an assumption of a reduction in QR Network's covariance with the market and the relativity of QR Network's risk to regulated energy utilities. QR Network rejects the QCA's proposal as it does not believe that the additional risk management measures sought by QR Network alter the covariance with the market.

The basis for QR Network's rejection of the QCA's decision regarding the asset beta was articulated in the response to the draft decision. For reasons of brevity QR Network will not restate those reasons, but for the avoidance of doubt, section 3.5 of

QR Network’s response to the draft decision and the accompanying report by Synergies on the asset beta attached to that response form part of this submission.

As indicated above, QR Network notes that the since release of the draft decision additional information has become available which is relevant to the determination of the asset beta.

Firstly, QR Network notes that the ACCC has determined an asset beta of 0.5 and an equity beta of 1.0 as reasonable for the Hunter Valley Coal Network. However, in comparing the HVAU draft decision and the QCA draft decision it is necessary to make adjustments for the levering methodology and differences in the debt betas assumed. The ACCC uses the Monkhouse approach and a debt beta of 0. The QCA relies on the use of the Conine approach and a debt beta of 0.12.

Applying the Conine approach and a debt beta of 0.12, in order to obtain an equity beta of 1.0 at a gearing level of 50% as proposed by the ACCC the QCA would need to adopt an asset beta of 0.6. Based on this same approach and assumptions but applying QR Network’s proposed gearing level of 55%, the asset beta would be 0.55 (which is in the middle of QR Network’s proposed range). This is a significant and material variance to the 0.45 proposed by the QCA. In making any comparison to asset beta decisions by other regulators some regard must be had to the resultant equity beta outcomes in sense checking the reasonableness of the asset beta as the equity beta ultimately determines the return on equity.

QR Network maintains that a reasonable range for the asset beta lies between 0.5 and 0.6. Based on the relativity of the HVAU draft decision and the proposed asset beta by DBCT as shown in Table 4.2, QR Network has determined its proposed equity beta with reference to an asset beta of 0.55.

Table 4.2 - Beta relativities

	Draft Decision	April Submission	HVAU	DBCT Proposed
Equity Beta	0.8	1.0	1.0	1.0
Debt beta	0.12	0.12	0	0.11
Gearing	55%	55%	50%	60%
Asset Beta	0.45	0.55	0.6	0.5

In reducing the asset beta to 0.45 the QCA has made reference to:

- the asset beta applicable to energy utilities; and
- additional risk management measures sought by QR Network.

In relation to the relativity of the energy utility businesses the ACCC has observed that AER decisions on utility firms have determined an asset beta range of 0.30 to 0.55. The ACCC has also observed that these utilities are likely to be marginally less risky than the Hunter Valley Coal Network¹³.

Also in determining the equity beta the ACCC has noted:

'The ACCC has considered it appropriate to be conservative in setting beta given the uncertainty surrounding ARTC's risks and to encourage investment. ... The ACCC's view is that it is appropriate for greater conservatism to be used here than is arguably required in other regulated areas such as electricity due to a lack of direct proxies for ARTC and greater uncertainty with respect to demand and asset stranding risk. The ACCC considers that for most regulated businesses there are direct proxies that lessen the need for such conservatism as applied here'¹⁴.

QR Network's response to draft decision did not consider that there is any basis for supporting a further reduction in QR Network's beta as a consequence of risk mitigation measures. The relevant measure will either have a relatively immaterial effect on beta (or an effect that cannot be readily discernible), or was not previously seen by the QCA as influencing beta in the past.

Should the QCA maintain its position that these measures do affect asset beta the QCA must take account of the different risk measures adopted by other regulated utilities which have been considered in assessing the reasonableness of the asset beta either by the relevant economic regulator or its customers. The summary in Table 4.3 compares the risk profile of the HVAU and the DBCT Draft Access Undertaking against the 2010 DAU.

¹³ Ibid. p.562

¹⁴ Ibid. p.563-564

Table 4.3- Comparative Risk Assessment

	QR Network	ARTC	DBCT
Take-or-pay (cash flow volatility)	Post UT1 collected annually	Collected Monthly	Collected monthly
Annual Price Reset	Volume reset and limited input cost reset	Volume and forecast cost reset	Volume and allowable revenue reset
Input Cost Variations	Maintenance cost and operating costs escalated by MCI and CPI respectively Material price and scope risk	Annual unders and overs adjustment for efficient costs. Limited price and scope risk.	Pass through of terminal operations costs.
Asset Stranding	Reduced life on new capex only.	Economic life set to weighted average production life of current mines	Straight line over economic life (44 years).
Debt Management	Hedging costs on investment borrowings	Hedging cost on investment borrowings	Reduced hedging costs on new capex with revenue reset and differential WACC on new investment.
Asset Roll-forward	Consumer prices index movement effects on RAB not captured until next regulatory period	RAB roll-forward reflected in annual prices	RAB roll-forward reflected in annual prices.

As evident in from the risk comparisons QR Network considers that the QCA's draft decision does not align with the risk reward relative to other relevant regulated businesses.

QR Network therefore considers an asset beta of 0.5 is reasonable on the following basis that is:

- consistent with the nominated range of 0.5 to 0.6;
- less than the implied asset beta in the HVAU draft decision of 0.6, which is the outcome that would occur if the QCA's preferred delevering method and

debt beta assumption was used (at the same gearing level, the implied asset beta would be 0.55); and

- less than the comparators proposed by QR Network in its previous submissions.

4.3.6 Cost of Capital

QR Network proposes a post tax nominal weighted average cost of capital (vanilla) of 10.81%. The derivation of this estimate is summarised in Table 4.4.

Parameter	UT2	QCA Draft Decision (5 Yr)	ACCC Draft Decision HVAU	QR Network Submitted
<i>Capital Structure (% debt)</i>	55%	55%	50%	55%
<i>Debt Beta</i>	0.12	0.12	0.12	0.12
<i>Debt Rating</i>	BBB+	BBB+	BBB	BBB+
<i>Debt Margin</i>	1.30%	3.62%	4.45%	4.45%
<i>Debt financing</i>	0.13%	0.13%	0.10%	0.13%
<i>Risk Free Rate</i>	5.21%	5.19%	5.60%	5.60%
<i>Market Risk Premium</i>	6%	6%	6%	6%
<i>Imputation Credits Value</i>	50%	50%	65%	50%
<i>Corporate Tax Rate</i>	30%	30%	30%	30%
<i>Inflation Rate</i>	2.50%	2.50%	2.50%	2.50%
<i>Asset Beta</i>	0.50	0.45	0.60	0.55
<i>Equity Beta</i>	0.90	0.80	1.00	1.00
<i>Cost of Equity</i>	10.61%	9.99%	11.60%	11.58%
<i>Cost of Debt</i>	6.64%	8.94%	10.15%	10.18%
WACC (vanilla)	8.43%	9.41%	10.87%	10.81%
<i>Pre-tax cost of equity</i>	12.48%	11.75%	12.96%	13.62%
<i>Nominal pre-tax WACC</i>	9.27%	10.20%	11.55%	11.73%
Real Pre-tax WACC	6.60%	7.52%	8.83%	9.00%

* HVAU Draft Decision is implied based on application of key decisions such as cost of debt and equity beta.

4.3.7 Volume Forecasts

The volume forecasts provided to the QCA with the September 2008 submission were in line with those volumes forecast at the time. However, these volumes forecasts could not foresee the Global Financial Crisis (GFC) and the resulting substantial decline in volumes.

In its February 2010 response to the QCA draft decision, QR Network provided revised volumes which reflected a rebound in coal volumes since the GFC.

QR Network provides the following volumes as an update to those provided in February 2010.

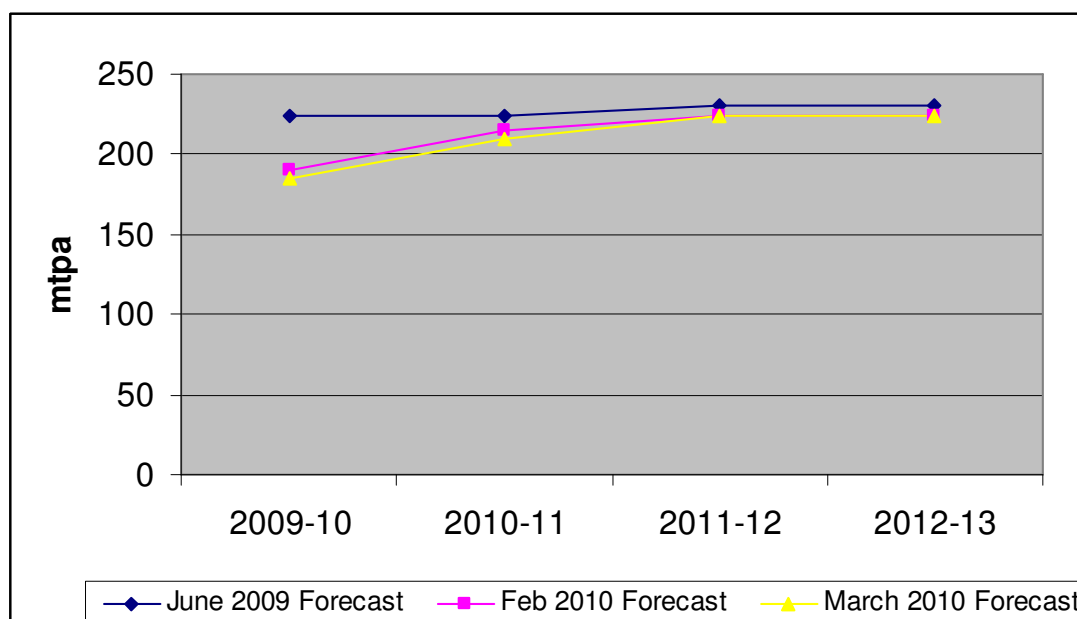
Table 4.5 Revised Volume Forecasts for Central Queensland Coal Region – March 2010 (excluding GAPE)

	2009-10	2010-11	2011-12	2012-13
Goonyella	99.04	112.36	124.91	124.91
Blackwater	58.22	63.14	64.62	64.62
Moura	11.97	16.44	16.44	16.44
Newlands	15.50	17.50	17.50	17.50
Total CQCR (ex GAPE)	184.74	209.44	223.47	223.47

The key difference between QR Network's March 2010 forecasts and the February 2010 forecasts, are:

- 2009-10 - this saw the total 2009/10 forecast decrease from 190.06 million tonnes per annum to 184.29 million tonnes per annum. Forecast figures have been updated to reflect coal chain performance for the year to January 2010.
- 2010-11 Goonyella system forecasts have been update to reflect incremental improvement (13.7%) on the forecast 2009/10 period. A 13.7% improvement on the 2009/10 year is considered a prudent and realistic target for the supply chain over a period as short as 12 months.

Figure 4.1 QR Network’s CQCR volume forecasts: June 2009 versus February & March 2010



Factors not included in the volume forecast

Volumes in the 2009/10 year are subject to a substantial degree of uncertainty as production and supply chain capacity effects of cyclone Ului are still being evaluated.

As QR Network’s primary objective for the 2009-10 financial year is the recovery the 2009-10 allowable revenues QR Network considers it reasonable that the volume forecast for the 2009-10 year be determined at a date closer to the end of the financial year and prior to the QCA’s decision. In this regard QR Network proposes to update the 2009/10 volumes in early May 2010 when the full effects of cyclone Ului on expected supply chain throughput can more precisely understood. This approach would enable QR Network to recover the correct revenues for the 2009/10 year and reduce any revenue cap adjustment.

4.3.8 Capital Indicator

The Capital Indicator amount included as the basis for the reference tariffs in the 2010 DAU is similar to that proposed in QR Network’s response to the QCA draft decision on 15 February 2010 (a summary of the difference between the capital indicator in September 2008 and February 2010 is provided later in this section).

The main drivers of the variation between the indicator submitted in February 2010 and the one used in the current calculation is:

Additional Vermont capital has been identified and captured separately in the capital indicator.

1. The allocation of system wide capital has been amended so that system wide capital is no longer allocated separately to Minerva, Rolleston and Vermont. This adjustment has been made because these individual mines contribution to system wide capital will be done via their contribution to common costs of the relevant systems. To clarify, total system wide capital has not been adjusted; just the allocation of this capital to individual systems has changed.
2. The rounding of the indicator has in the past been taken to the closest million dollars. This has been adjusted to the closest hundred thousand dollars. This decision was made to ensure that the smaller sub-systems of Minerva, Rolleston and Vermont were not set an indicator excessively high relative to their applicable forecast capital. Overall this adjustment has made very little difference to the overall indicator amount.

Table 4.6 - UT3 Proposed Capital Indicator (\$m)

System	2009/10	2010/11	2011/12	2012/13	Total
Blackwater Non-electric (excluding Minerva and Rolleston)	62.4	33.1	28.2	13.7	137.4
Blackwater Electric	15.5	80.7	149.3	51.1	296.6
Minerva	0.3	0	0	0	0.3
Rolleston	0	0	0	11.6	11.6
Total Blackwater	78.2	113.8	177.5	76.4	445.9
Goonyella Non-electric (excluding Vermont)	284.8	45.8	55.8	21.4	407.8
Vermont Non-electric	4.9	1.7	0	0	6.6
Goonyella Electric (excluding Vermont)	55.7	12.9	24.9	44.4	137.9
Vermont Electric	1.5	0.5	0	0	2.0
Total Goonyella	346.9	60.9	80.7	65.8	554.3
Moura	1.6	8.6	3.6	1.3	15.1

Newlands	1.3	2.4	42.2	1.5	47.4
TOTAL	428.0	185.7	304.0	145.0	1,0627

The difference between the September 2008 submission and February 2010 are provided below.

Blackwater system

In September 2008, QR Network’s forecast UT3 expenditure in the Blackwater System was \$413.1 million. The revised forecast as at February 2010 is \$360.1 million. The main reason for the decrease is the removal of three Blackwater mainline duplication projects: Rocklands to Gracemere to Kabra, Walton to Bluff and Kabra to Stanwell. This represents a decrease of \$167 million.

Furthermore, QR Network had included the commissioning of the Stanwell Wycarbah duplication (\$70 million) in the UT3 period. This project was actually commissioned in April 2009 and therefore fell into the UT2 period. These decreases were somewhat balanced by the increase in the forecast relating to four feeder stations at Bluff, Raglan, Duaringa and Wycarbah to \$172 million, compared to the September 2008 forecast of \$120 million.

Goonyella system

In September 2008, QR Network’s forecast UT3 expenditure in the Goonyella System was \$488.1 million. The revised forecast in February 2010 was \$443.9 million. A number of projects (totalling \$198 million) were identified in the 2008 forecast as being required for future Goonyella expansion to the existing ports.

These duplications and passing loops have been remodelled and have been identified as required but are for expansions outside the existing Goonyella system (GAPE and HPX3). As such they have been removed from this forecast. However, \$100 million in renewal of power systems assets has been identified and added to the forecast, which counter-balances these reductions.

Moura system

There have been minimal changes to the forecast in the Moura system.

Newlands system

In September 2008, QR Network's forecast UT3 expenditure in the Newlands System was \$40.0 million. This was related to three mine-specific expansion projects. Of these projects, Sonoma (\$10 million) was commissioned in 2008/09 and therefore falls into the UT2 period. The other two projects, Havilah (\$15 million) and Byerwen (\$15 million) were included as part of the Newlands growth supported by 75/100mtpa at Abbott Point. However, as they are not included in the confirmed 50 million tonnes per annum at the port they have been removed.

In these revised forecasts, QR Network has included \$40 million of expenditure in 2011/12 for ballast upgrades. While this expenditure had been identified as part of the Newlands upgrades associated with GAPE, this expenditure would have been required even if GAPE did not proceed. This expenditure will not increase volumes however will improve the quality of the ballast which is necessary to improve the integrity and performance of the network in the long term. While ballast replacement is typically a maintenance activity and therefore normally treated as an operating expense, given the materiality of the ballast replacement requirements including the expenditure in maintenance costs would result in an unreasonable increase in the proposed Newlands Reference Tariff.

In excluding GAPE for the purpose of developing its UT3 forecasts, QR Network is of the view that it is reasonable to consider expenditure that would otherwise be incurred in this system on a stand-alone basis. The ballast upgrade expenditure is not dependent on GAPE. As it is certain that this expenditure will be required in the Newlands system, it is considered reasonable to reflect this in the starting UT3 Reference Tariffs.

Summary

In total the September 2008 UT3 Capital Indicator was \$1.353 billion. The revised forecast in February 2010 was \$1.052 billion, representing a net difference of \$301 million over the four year period. **This capital indicator now proposed is \$1.063 billion.**

Most of the difference is accounted for in the Blackwater system due to the removal of projects that are now required to support the Wiggins Island Coal Terminal and the removal of mainline expansion projects in Goonyella (now required but supporting GAPE and HPX3).

4.3.9 Capital Carry-over amount

The Capital Carryover Amount that was approved in the QCA's Draft Decision (\$16.4m) was an estimation of the possible amount. This was prior to the 2008/09 capital claim being finalised and before the completion of an independent audit of the Capital Carryover Model commissioned by QR Network.

The results of this audit and the finalised 2008/09 capital claim have now been finalised and **QR Network now provides a revised Capital Carryover Amount of \$5.253 million.**

There are significant differences between what was forecast previously and what is now being submitted. The reasons behind these variations are set out below.

1. The initial forecasted capital claim amount for 2008/09 was set at \$411.9m. The finalised number for this claim is now \$366.1m. The main point of difference between these numbers is due to the removal of GAPE related capital from the approved 2008/09 amount.
2. The Capital Indicator for Vermont was added to the Capital Indicator for the 2008/09 year. This indicator aligns with what was approved by the QCA in the Vermont Access Undertaking, and totalled \$47.245m. This effectively increased the Capital Indicator in 2008/09 from \$160m to \$207.245m.

3. In the calculation of the carryover amount applicable to the over spend in 2007/08, the previous capital carryover model did not take into account that 5 major projects in that year were written into the Regulatory Asset Base at the end of the financial year (as per the approved 2007/08 Capex Claim), and should not have incurred any capital related costs for that year. The previous capital carryover model correctly assumed nil depreciation for these projects but still calculated a half year of inflation, return, tax depreciation and interest for these projects. Because these 5 projects accounted for approximately 80% of the total capex claim for 2007/08, this error accounts for a significant portion of the difference between the forecast carryover amount and the revised amount.
4. During the audit of the Capital Carryover Model, two adjustments to the way the model operates were recommended in order to achieve a more accurate result.
 - a. The first of these adjustments was the removal of the mid-year discounting of the post-tax MAR.
 - b. The second adjustment was the inclusion of the tax losses, if any, that had already been calculated in the UT2 Tariff Model for each of the systems.

Actual and Forecast Capital Expenditure

Table 4.7 - Actual UT2 Capital Expenditure (\$m)

	2005-06	2006-07	2007-08	2008-09	Total
Blackwater Non-electric (incl Minerva)	66.412	65.933	90.758	130.482	353.585
Blackwater Electric	12.554	7.645	10.756	14.882	45.838
Goonyella Non-electric (incl Hail Creek)	48.418	56.363	117.948	105.110	327.839
Vermont Non- electric				46.053	46.053
Goonyella Electric	5.247	4.210	19.462	57.697	86.616
Vermont Electric	0	0	0	9.084	9.084
Moura	1.712	24.139	2.962	0.765	29.579
Newlands	0.291	0.310	8.982	1.990	11.574
Total	134.634	158.600	250.869	366.065	910.168

Table 4.8 - UT2 Capital Indicator (\$m)

	2005-06	2006-07	2007-08	2008-09	Total
Blackwater Non-electric	56.0	56.0	56.0	56.0	224.0
Blackwater Electric	12.0	12.0	12.0	12.0	48.0
Goonyella Non-electric (excl Vermont)	56.0	56.0	56.0	56.0	224.0
Vermont Non-electric	0	0	0	47.245	47.245
Goonyella Electric (excl Vermont)	12.0	12.0	12.0	12.0	48.0
Vermont Electric	0	0	0	0	0
Moura	16.0	16.0	16.0	16.0	64.0
Newlands	8.0	8.0	8.0	8.0	32.0
Total	160.0	160.0	160.0	207.245	687.245

Table 4.9 - Capital Carryover Amount (\$m)

	Total
Blackwater Non-electric	9.943
Blackwater Electric	(1.494)
Goonyella Non-electric (excl Vermont)	8.691
Vermont Non-electric	0.163
Goonyella Electric (excl Vermont)	(1.735)
Vermont Electric	0.548
Moura	(6.140)
Newlands	(4.725)
Capital Carryover Amount Total	5.253

4.3.10 Opening Asset Value

QR Network's opening asset value in the 2010 DAU is \$3.247 billion. This compares to the opening asset value accepted by the QCA in its December 2010 draft decision which was \$3.284 billion.

The variation in this number is due to the Vermont opening value which has been adjusted to align with the amount included in the 2008/09 capex claim for Vermont and also adds the correct amount accepted by the QCA in the 2008/09 capital expenditure claim.

Table 4.10 - 2010 Opening Asset value (\$'000)

	2005-06	2006-07	2007-08	2008-09	Total
Blackwater					
Opening Asset Value	808,061	888,290	948,561	1,058,515	808,061
Capital Expenditure	78,966	73,578	101,514	145,360	399,418
Inflationary Gain	35,015	23,684	48,960	22,832	130,491
Depreciation	(33,752)	(36,990)	(40,521)	(46,313)	(157,576)
Closing Asset Value	888,290	948,561	1,058,515	1,180,394	1,180,394
Removal of System Wide Assets					(3,652)
UT3 Opening Asset Value					1,176,742
<i>Rolleston</i>					
Opening Asset Value	251,900	251,873	247,674	249,158	251,900
Capital Expenditure	-	-	-	-	-
Inflationary Gain	6,894	6,450	12,677	5,031	31,052
Depreciation	(6,922)	(10,648)	(11,193)	(11,419)	(40,183)
Closing Asset Value	251,873	247,674	249,158	242,769	242,769
UT3 Opening Asset Value					242,769
<i>Minerva</i>					
Opening Asset Value	52,722	71,357	75,434	76,397	52,722
Capital Expenditure	18,374	4,863	-	4	23,241
Inflationary Gain	1,946	1,889	3,861	1,543	9,239
Depreciation	(1,685)	(2,674)	(2,898)	(2,956)	(10,214)
Closing Asset Value	71,357	75,434	76,397	74,988	74,988

	2005-06	2006-07	2007-08	2008-09	Total
UT3 Opening Asset Value					74,988
Goonyella					
Opening Asset Value	807,954	854,763	896,652	1,035,127	807,954
Capital Expenditure	50,278	60,573	137,410	162,808	411,068
Inflationary Gain	34,424	22,660	46,275	22,535	125,894
Depreciation	(37,892)	(41,344)	(45,211)	(52,024)	(176,471)
Closing Asset Value	854,763	896,652	1,035,127	1,168,444	1,168,444
Removal of System Wide Assets					(3,804)
UT3 Opening Asset Value					1,164,641
<i>Hail Creek</i>					
Opening Asset Value	108,761	113,679	113,444	115,943	108,761
Capital Expenditure	3,387	-	-	-	3,387
Inflationary Gain	4,565	2,911	5,807	2,341	15,623
Depreciation	(3,034)	(3,147)	(3,308)	(3,375)	(12,862)
Closing Asset Value	113,679	113,444	115,943	114,909	114,909
UT3 Opening Asset Value					114,909
<i>Vermont</i>					
Opening Asset Value	-	-	-		-
Capital Expenditure	-	-	-	55,138	55,138
Inflationary Gain	-	-	-	554	554
Depreciation	-	-	-	(1,392)	(1,392)
Closing Asset Value	-	-	-	54,299	54,299
UT3 Opening Asset Value					54,299
Moura					
Opening Asset Value	223,155	227,025	249,663	257,100	223,155
Capital Expenditure	1,712	24,139	2,962	765	29,579
Inflationary Gain	9,259	6,121	12,854	5,199	33,432
Depreciation	(7,101)	(7,622)	(8,380)	(8,598)	(31,701)
Closing Asset Value	227,025	249,663	257,100	254,465	254,465
Removal of System Wide Assets					(1,060)

	2005-06	2006-07	2007-08	2008-09	Total
UT3 Opening Asset Value					253,405

Newlands					
Opening Asset Value	157,415	158,421	156,837	167,590	157,415
Capital Expenditure	291	310	8,982	1,990	11,574
Inflationary Gain	6,512	4,061	8,255	3,404	22,232
Depreciation	(5,798)	(5,956)	(6,483)	(6,865)	(25,102)
Closing Asset Value	158,421	156,837	167,590	166,118	166,118
Removal of System Wide Assets					(745)
UT3 Opening Asset Value					165,374

	2005-06	2006-07	2007-08	2008-09	Total
TOTAL CQCR					
Opening Asset Value	2,409,968	2,565,408	2,688,265	2,959,830	2,409,968
Capital Expenditure	153,008	163,463	250,869	366,065	933,405
Inflationary Gain	98,615	67,775	138,690	63,436	368,517
Depreciation	(96,183)	(108,381)	(117,994)	(132,943)	(455,502)
Closing Asset Value	2,565,408	2,688,265	2,959,830	3,256,388	3,256,388
Removal of System Wide Assets					(9,261)
UT3 Opening Asset Value					3,247,127

4.3.11 Operating Costs

QR Network proposes to accept the Operating costs approved by the QCA in its draft decision, inclusive of its decision on risk and insurance. Therefore the operating costs used in the Reference Tariff calculation are shown in the following table.

Table 4.11 - UT3 Proposed System-wide and Regional Costs – by System (\$m) inclusive of Risk and Insurance Costs

System	2009/10	2010/11	2011/12	2012/13
Blackwater (incl Minerva and Rolleston)	24.6	25.2	26.2	26.7
Goonyella (incl Hail Creek and Vermont)	24.9	26.0	27.6	28.0
Moura	4.6	4.8	5.0	5.1
Newlands	5.1	4.9	5.2	5.9
Total	59.2	60.8	64.0	65.6

4.3.12 Transmission and Connection Costs

The following table shows the large variation in Transmission and costs from the September 2008 submission to the 2010 DAU. A description of this variation is provided below.

Table 4.12 – Comparison of QR Network’s Transmission Costs (\$’000)

	2009/10	2010/11	2011/12	2012/13
September 2008				
Blackwater	6,948	14,535	28,483	27,533
Goonyella	23,213	22,439	21,691	20,968
2010 DAU				
Blackwater	9,548	10,704	11,094	43,549
Goonyella	21,380	30,731	32,900	34,429
Variance				
Blackwater	2,600	(3,831)	(17,389)	16,016
Goonyella	(1,832)	8,292	11,209	13,461

At the time of preparing the input cost forecasts for the September 2008 submission there a lot of uncertainty surrounding the transmission costs for the UT3 period principally because the 2008 submission was prior to:

- Publication of charges by the Transmission provider, Powerlink, for the year 2009-10.

- A scoping paper being provided by Powerlink for four new substations in the Blackwater system.

QR Network's forecast in September 2008 was based on the published prices prevailing for the 2007-08 financial year and our expectation of the timing and connection costs associated with the new Blackwater feeder stations.

In order to reliably predict forecast connection costs and the allocation of Powerlink revenues to connection points a simulation to reflect the pricing obligations in the National Electricity Rules would be required. In practice, such a model would require detailed input information on asset values, load flows (and so on). This information is not publicly available and Powerlink advised that for these reasons it was unable to provide us with an estimate of future costs..

Key drivers in the difference between the network charges in the September 2008 submission:

- Impact of 7.6% real increase in Powerlink's annual revenue requirement in accordance with its revenue determination;
- The phasing out of the variable energy price and allocation of cost recovery to capacity charges which remove the Blackwater systems benefit of low load factors;
- The variations in the revenue allocation to exit class assets and the pricing formula for prescribed connections allocates revenue to a connection on the basis of proportion of total replacement cost for all assets in that class;
- Revised forecasts made available from the connection enquiry to Powerlink for the additional Blackwater substations; and
- Completion of negotiations for the Dalrymple Bay feeder station.

Improving robustness of QR Network's transmission forecast

Network charges comprised of two key components:

- Costs associated with connecting transmission infrastructure; and
- Costs associated with usage and contribution to common assets (TUOS).

For each connection point there is TOUS charges which are a combination of fixed and variable prices.

In order to improve the robustness of the transmission cost forecasts QR Network engaged the assistance of Hill Michael to prepare forecasts which are based on a number of assumptions regarding how connection and common use charges are determined.

4.3.13 Forecast Transmission Charges

System (TUoS) charges, and their use by QR Network, are designed to recover the costs associated with the interconnected transmission system, inclusive of substations, that allow the transmission of power throughout Queensland. When connected to the transmission network only TUoS applies as the customer is assumed to only use that network.

- TUoS (1) Is the usage by Capacity charge levied at \$/KW/month
- TUoS (2) Is the usage by Energy charge levied at c/KWh
- TUoS (3) Is the General energy charge levied at c/KWh
- TUoS (4) Is the Common energy charge levied at c/KWh

Connection charges recover the costs associated with assets that are solely required for a single customer, such as a substation or a dedicated spur line from main interconnected circuits. These are levied at \$'000/month.

Forecast connection and TUoS prices for connection points in the CQCR over the UT3 period are summarised in Tables 4.13 to 4.16.

Table 4.13 - 2009/10 Connection Charges

		Connection	TUoS (1)	TUoS (2)	TUoS (3)	TUoS (4)
Blackwater	Callemondah	\$ 0.46	\$ 0.15	\$ 0.38	\$ 0.41	
	Raglan	\$ 0.60	\$ 0.09	\$ 0.38	\$ 0.41	
	Rocklands	\$ 0.60	\$ 0.09	\$ 0.38	\$ 0.41	
	Wycarbah	\$ 0.60	\$ 0.09	\$ 0.38	\$ 0.41	
	Grantleigh	\$ 0.60	\$ 0.09	\$ 0.38	\$ 0.41	
	Duaringa	\$ 1.49	\$ 0.43	\$ 0.38	\$ 0.41	
	Dingo	\$ 1.49	\$ 0.43	\$ 0.38	\$ 0.41	
	Bluff	\$ 1.83	\$ 0.25	\$ 0.38	\$ 0.41	
	Blackwater	\$ 1.83	\$ 0.25	\$ 0.38	\$ 0.41	
	Gregory	\$ 1.46	\$ 0.22	\$ 0.38	\$ 0.41	
Goonyella	DBCT	\$ 1.86	\$ 0.32	\$ 0.38	\$ 0.41	
	Oonooie	\$ 1.86	\$ 0.32	\$ 0.38	\$ 0.41	
	Bolingbroke	\$ 1.45	\$ 0.31	\$ 0.38	\$ 0.41	
	Wandoo	\$ 1.45	\$ 0.31	\$ 0.38	\$ 0.41	
	Mindi	\$ 1.45	\$ 0.31	\$ 0.38	\$ 0.41	
	Coppabella	\$ 1.57	\$ 0.37	\$ 0.38	\$ 0.41	
	Peak Downs	\$ 1.85	\$ 0.56	\$ 0.38	\$ 0.41	
	Norwich Park	\$ 1.40	\$ 0.61	\$ 0.38	\$ 0.41	
	Moranbah South	\$ 1.74	\$ 0.25	\$ 0.38	\$ 0.41	
	Mt McLaren	\$ 1.74	\$ 0.25	\$ 0.38	\$ 0.41	

Table 4.14 – 2010/11 Connection Charges

		Connection	TUoS (1)	TUoS (2)	TUoS (3)	TUoS (4)
Blackwater	Callemondah	\$ 0.59	\$ 0.11	\$ 0.45	\$ 0.38	
	Raglan	\$ 0.76	\$ 0.06	\$ 0.45	\$ 0.38	
	Rocklands	\$ 0.76	\$ 0.06	\$ 0.45	\$ 0.38	
	Wycarbah	\$ 0.76	\$ 0.06	\$ 0.45	\$ 0.38	
	Grantleigh	\$ 0.76	\$ 0.06	\$ 0.45	\$ 0.38	
	Duaringa	\$ 1.89	\$ 0.31	\$ 0.45	\$ 0.38	
	Dingo	\$ 1.89	\$ 0.31	\$ 0.45	\$ 0.38	
	Bluff	\$ 2.32	\$ 0.18	\$ 0.45	\$ 0.38	
	Blackwater	\$ 2.32	\$ 0.18	\$ 0.45	\$ 0.38	
	Gregory	\$ 1.85	\$ 0.16	\$ 0.45	\$ 0.38	
Goonyella	DBCT	\$ 2.36	\$ 0.23	\$ 0.45	\$ 0.38	
	Oonooie	\$ 2.36	\$ 0.23	\$ 0.45	\$ 0.38	
	Bolingbroke	\$ 1.83	\$ 0.22	\$ 0.45	\$ 0.38	
	Wandoo	\$ 1.83	\$ 0.22	\$ 0.45	\$ 0.38	
	Mindi	\$ 1.83	\$ 0.22	\$ 0.45	\$ 0.38	
	Coppabella	\$ 1.98	\$ 0.26	\$ 0.45	\$ 0.38	
	Peak Downs	\$ 2.34	\$ 0.40	\$ 0.45	\$ 0.38	
	Norwich Park	\$ 1.77	\$ 0.43	\$ 0.45	\$ 0.38	
	Moranbah South	\$ 2.20	\$ 0.18	\$ 0.45	\$ 0.38	
	Mt McLaren	\$ 2.20	\$ 0.18	\$ 0.45	\$ 0.38	

Table 4.15 – 2011/12 Connection Charges

		Connection	TUoS (1)	TUoS (2)	TUoS (3)	TUoS (4)
Blackwater	Callemondah	\$ 0.72	\$ 0.06	\$ 0.48	\$ 0.41	
	Raglan	\$ 0.93	\$ 0.03	\$ 0.48	\$ 0.41	
	Rocklands	\$ 0.93	\$ 0.03	\$ 0.48	\$ 0.41	
	Wycarbah	\$ 0.93	\$ 0.03	\$ 0.48	\$ 0.41	
	Grantleigh	\$ 0.93	\$ 0.03	\$ 0.48	\$ 0.41	
	Duaringa	\$ 2.33	\$ 0.16	\$ 0.48	\$ 0.41	
	Dingo	\$ 2.33	\$ 0.16	\$ 0.48	\$ 0.41	
	Bluff	\$ 2.86	\$ 0.10	\$ 0.48	\$ 0.41	
	Blackwater	\$ 2.86	\$ 0.10	\$ 0.48	\$ 0.41	
	Gregory	\$ 2.27	\$ 0.08	\$ 0.48	\$ 0.41	
Goonyella	DBCT	\$ 2.91	\$ 0.12	\$ 0.48	\$ 0.41	
	Oonooie	\$ 2.91	\$ 0.12	\$ 0.48	\$ 0.41	
	Bolingbroke	\$ 2.26	\$ 0.12	\$ 0.48	\$ 0.41	
	Wandoo	\$ 2.26	\$ 0.12	\$ 0.48	\$ 0.41	
	Mindi	\$ 2.26	\$ 0.12	\$ 0.48	\$ 0.41	
	Coppabella	\$ 2.44	\$ 0.14	\$ 0.48	\$ 0.41	
	Peak Downs	\$ 2.89	\$ 0.21	\$ 0.48	\$ 0.41	
	Norwich Park	\$ 2.19	\$ 0.23	\$ 0.48	\$ 0.41	
	Moranbah South	\$ 2.71	\$ 0.10	\$ 0.48	\$ 0.41	
	Mt McLaren	\$ 2.71	\$ 0.10	\$ 0.48	\$ 0.41	

Table 4.16 – 2012/13 Connection Charges

		Connection	TUoS (1)	TUoS (2)	TUoS (3)	TUoS (4)
Blackwater	Callemondah	\$ 0.86	\$ -	\$ 0.51	\$ 0.43	
	Raglan	\$ 1.11	\$ -	\$ 0.51	\$ 0.43	
	Rocklands	\$ 1.11	\$ -	\$ 0.51	\$ 0.43	
	Wycarbah	\$ 1.11	\$ -	\$ 0.51	\$ 0.43	
	Grantleigh	\$ 1.11	\$ -	\$ 0.51	\$ 0.43	
	Duaringa	\$ 2.78	\$ -	\$ 0.51	\$ 0.43	
	Dingo	\$ 2.78	\$ -	\$ 0.51	\$ 0.43	
	Bluff	\$ 3.42	\$ -	\$ 0.51	\$ 0.43	
	Blackwater	\$ 3.42	\$ -	\$ 0.51	\$ 0.43	
	Gregory	\$ 2.71	\$ -	\$ 0.51	\$ 0.43	
Goonyella	DBCT	\$ 3.47	\$ -	\$ 0.51	\$ 0.43	
	Oonooie	\$ 3.47	\$ -	\$ 0.51	\$ 0.43	
	Bolingbroke	\$ 2.69	\$ -	\$ 0.51	\$ 0.43	
	Wandoo	\$ 2.69	\$ -	\$ 0.51	\$ 0.43	
	Mindi	\$ 2.69	\$ -	\$ 0.51	\$ 0.43	
	Coppabella	\$ 2.91	\$ -	\$ 0.51	\$ 0.43	
	Peak Downs	\$ 3.44	\$ -	\$ 0.51	\$ 0.43	
	Norwich Park	\$ 2.61	\$ -	\$ 0.51	\$ 0.43	
	Moranbah South	\$ 3.24	\$ -	\$ 0.51	\$ 0.43	
	Mt McLaren	\$ 3.24	\$ -	\$ 0.51	\$ 0.43	

4.3.14 Maintenance Costs

The QCA's draft decision on QR Network's proposed maintenance costs reduced the maintenance allowance by \$185.6 million or 26% over the period of UT3.

The draft decision and accompanying GHD report detailed six recommended adjustments to the maintenance cost allowance:

- 1 The maintenance costs associated with the Goonyella Abbot Point Expansion (GAPE) were extracted;
- 2 The labour allowance be reduced because it was thought that QR Network had assumed a 4% real increase in the cost of labour over the UT2 period;
- 3 The track and structures allowance was reduced to take into account changes to the kilometres of track maintained;
- 4 The margin be reduced from 15% applicable to all direct costs to 15% applicable to labour costs only (effectively a reduction in the margin to between 4% and 5% on direct costs);
- 5 The ballast treatment budget was reduced by 50% of the original QR Network estimate or 56% of the adjusted ballast treatment allowance); and
- 6 An 'X factor' was applied to the final maintenance cost allowance in anticipation of efficiency improvements over the period.

QR Network's response to the draft decision rejected the conclusions by the QCA and the recommendations made by GHD in its report on operating and maintenance costs. Specifically, the response:

- Demonstrated the reasonableness of QR Network's proposed maintenance costs against the comparator networks when appropriate and necessary adjustments are made for key cost differences (i.e. traction and regulatory models);
- Provided details on the differential impacts of narrow gauge and standard gauge rail network drivers of coal fouling and concluded that the coal industry has obtained material throughput benefits through a lower below rail capital base;

- Included details of the reasonableness of the originally proposed margin and deconstructed the margin into its relevant risk and cost components to increase transparency;
- Specified material modelling errors in the adjustments made to the margin and ballast undercutting allowances;
- Detailed conceptual errors in the reduction in the Newlands maintenance costs when removing the incremental maintenance costs for the Goonyella to Abbot Point project; and
- Proposed to not apply an X-factor to the MCI escalation of the 2007-08 maintenance cost base as current cost estimates from changes such as safe maintenance practices (including people and plant separation) exceed the proposed maintenance allowance.

This submission does not replicate the content of the response to the draft decision and the supporting documents. For the avoidance of doubt, Section 9 of Volume 2 of the QR Network's response to the draft decision forms part of this submission.

In this submission, QR Network seeks to:

- Address perceptions of a maintenance deficit associated with past ballast undercutting activities;
- Clarify the application of the maintenance cost index to maintenance cost escalation;
- Transparently identify the inclusion of the corporate overhead and margin to the direct maintenance costs; and
- Include the appropriate adjustments for non-coal services to estimation of the maintenance costs.

Ballast Undercutting Rates

Based on discussions with the QCA following lodgement of the response to the draft decision it is our understanding that the QCA has concerns that forecast undercutting requirements are attributable in part to non-performance in previous maintenance periods. This perception is echoed by the QRC in its response when stating¹⁵:

‘The draft decision does not adequately address maintenance deficits. For example it is not clear the extent to which maintenance costs relating to ballast cleaning represents a maintenance deficit. Users should only pay once and we are concerned that there is scope for shifting cost claims between regulatory periods in order to effectively require users to pay for the same activity in two regulatory periods even though it will ultimately be undertaken only once’.

QR Network strongly rebuts suggestions that forecast ballast undercutting requirements are the consequence of ‘catch-up’ from failing to undertake past undercutting levels. To conclude that the network is subject to a maintenance deficit, QR Network would not have undertaken the required production. This would be clearly evident in either

- Actual maintenance costs incurred in total or by product; or
- The production levels would be substantially less than target.

The following sections demonstrate that neither of these conditions has been satisfied.

Historical Maintenance Expenditure

QR Network’s historical maintenance cost expenditure has exceeded the regulatory allowance in both the UT1 and UT2 regulatory periods. The UT1 annual maintenance cost report indicated that QR Network was achieving efficiencies in line with those assumed in the regulatory forecasts. As was discussed in the Maintenance DAU the reported costs reflected internal cost accounting deficiencies

¹⁵ Queensland Resources Council (2010) Submission in response to the QCA’s Draft Decision on QR Network’s 2009 Draft Access Undertaking, p.9 <http://www.qca.org.au/files/R-2009DAU-QRC-SubFinalQR09DAU-0210.PDF>

which misrepresented the actual costs associated with delivered performance levels. This error also informed the UT2 maintenance costs estimates which gave rise to the need for revisions of the maintenance costs in 2007. The chart in Figure 4.2 indicates the difference between the regulatory allowance, reported costs and the actual costs of service delivery for the UT1 period.

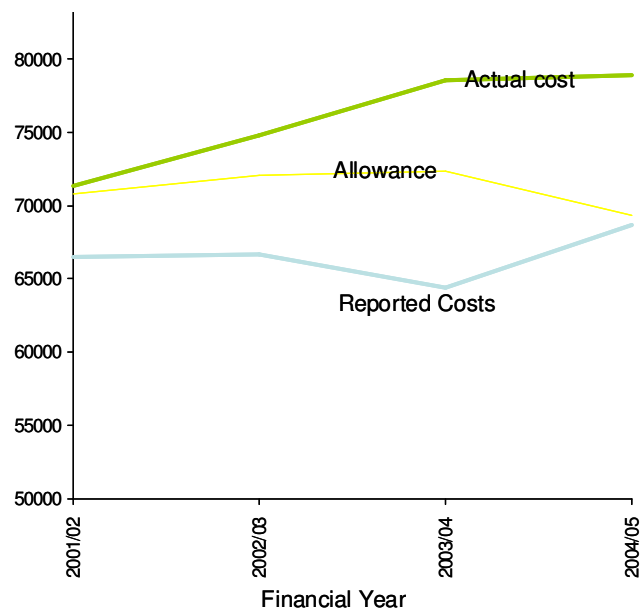


Figure 4.2 - Maintenance Cost Estimates and Outcomes for the UT1 Period

Figure 4.2 details the actual maintenance costs for the CQCR as reported in the annual maintenance report against the approved regulatory allowance, inclusive of the Maintenance DAU. The net difference between actual maintenance costs and the approved regulatory allowances over the UT2 period is \$87 million.

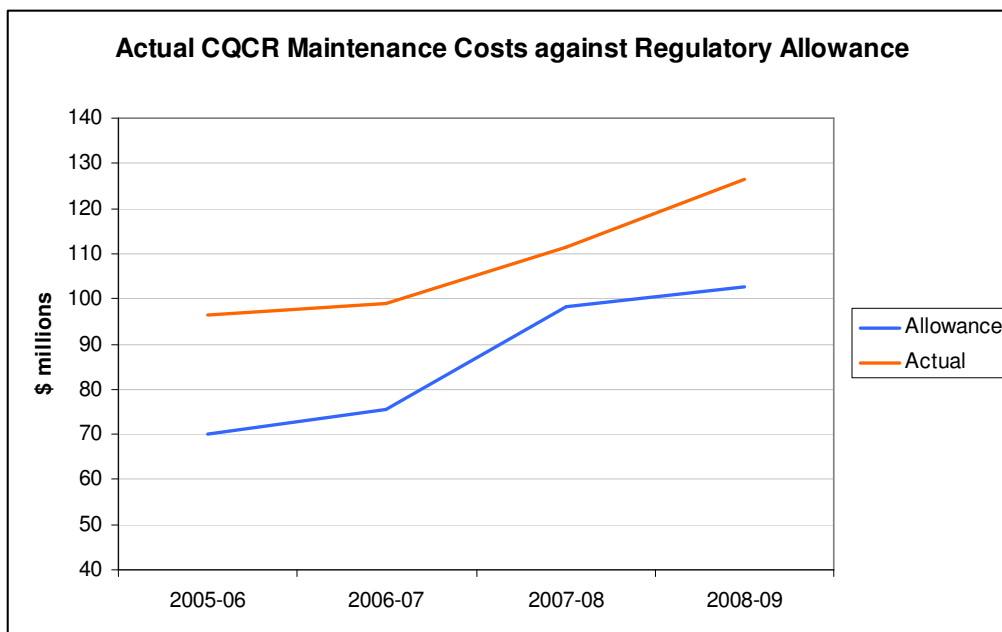
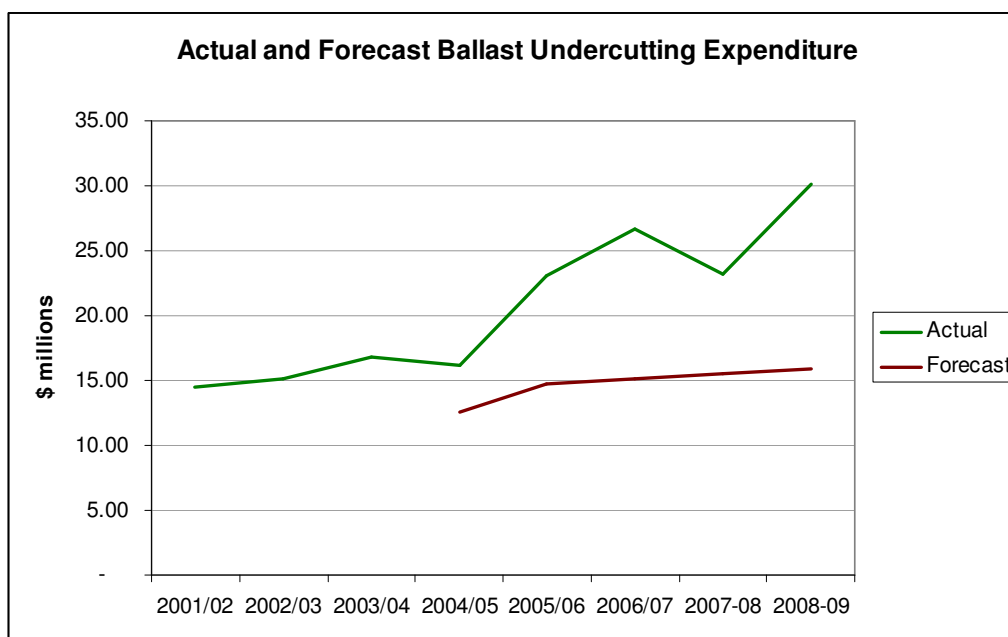


Figure 4.3 - Maintenance Cost Estimates and Outcomes for the UT2 Period

Figure 4.4 details the actual ballast undercutting costs for the CQCR as reported in the annual maintenance cost report against the assumed forecast.



* Sources. Actual. Annual maintenance cost reports. Forecast. Tables 4 and 11 of 2007 Maintenance DAU

Figure 4.4 – Actual vs Forecast ballast undercutting

It is evident from historical maintenance expenditure, both in total, and specific to, ballast undercutting that QR Network has not obtained a financial benefit from reducing maintenance levels.

Ballast Undercutter Production

Ballast undercutting production targets are dependent upon the planning assumptions associated with ballast return rates from screening. Where contaminated ballast has high moisture content return rates will be significantly lower. When returns rates are low, locational factors will govern whether spoiled ballast can be dumped or whether it needs to be captured. Production levels are also governed by track possession opportunities. The interaction of these factors and impact on shift productivity within a given possession window is detailed in Table 4.17 below.

As indicated in the September 2008 submission, opportunities to dump spoiled ballast within the rail corridor are becoming restricted both in terms of corridor availability and environmental responsibility.

Accordingly, the relationship between output and cost is not linear. It is a complex interaction of a number of factors which influence productivity of the existing capital and labour (i.e. unit rates are dynamic).

Table 4.17 – Ballast Undercutter Production Matrix

Return Rate Achieved (Spoil Dump)	Estimated Meters Per Shift (Spoil Dump)	Return Rate Achieved (Spoil Capture)	Estimated Meters Per Shift (Spoil Capture)
0%	320	0%	70
30%	425	30%	140
60%	500	60%	240
100%	600	100%	600

QR Network has reviewed the ballast undercutting production levels for the UT1 and UT2 periods and has summarised the issues associated with production levels for the relevant year in Table 4.18 below.

As is evident from the table, the production levels are strongly influenced by return rates and ability to spoil when the return rate is low.

On the basis of the actual historical production levels and the factors influencing variation from target, QR Network considers there is no supporting evidence that QR Network has reduced production levels to obtain financial benefit.

Table 4.18 – UT1 and UT2 Ballast Undercutter Production Summary

YEAR	Target kilometres assumed in regulatory allowance(1)	Actual km of Undercutting	Actual km of Total Dump	Production comments
2008/09	101	47.579	17.016	<p>Goonyella U/C - First 6wks of the financial year spent down near the port. Average daily cut was 280m due to difficulties with undercutting Fist Sleepers, closures, access, ballast trains and the entire section was total dump therefore amount of undercutting was constrained by daily available ballast and amount of resurfacing required to bring it back to operational speed. Another 2.5mths was spent from Yukan to Haypoint where production was slow due to 100% dump of ballast required, poor access, lack of areas to dump, issues with the provision of closures, crewing and supply of ballast trains and working with Fist sleepers. The remainder of the time in the Goonyella System was spent undercutting Bolingbroke - Wandoo section where production was improved to approx 0.380km per day and total dump sections were reduced. Blackwater U/C - On duplicated sections within the system with only 1.3km of total dump from the approx 12.4km of uc completed. Had some good possessions where they could remain cut in and increase production for a few days. Undercut around Tunnel range area which is difficult.</p>
2007/08	106	75.77	32.382	<p>In Blackwater, 43km of undercutting completed with only approx 2km of total dump required. Small area down at Callemondah completed within a 48hour closure producing a good average daily rate. On average the production was satisfactory in Blackwater. Completed approximately 10km of undercutting in the Newlands System with multi day possessions resulting in great daily production. Approximately 23km of undercutting was completed in the Goonyella System. 72% of the Goonyella Undercutting was undertaken down at the Port or on the approach section to the Port. Nearly 100% of this undercutting was total dump in restricted access areas resulting in a reduced average production of 330m per day. This slow production resulted in a decrease in production for the year, however it was a high</p>

YEAR	Target kilometres assumed in regulatory allowance(1)	Actual km of Undercutting	Actual km of Total Dump	Production comments
				priority area requiring undercutting.
2006/07	108	100.319	22.227	In Goonyella, 53km of undercutting completed and 47km of undercutting completed in Blackwater. Only 22km of the total required total dump of the ballast. The areas undercut were outside the port areas on duplicated sections. On average, there were good possessions with good daily production achieved.
2005/06	102	103.122	42.428	Over 50% of the undercutting was completed on the Blackwater System on duplicated track away from port areas with good track possession resulting in good daily production. 32km of undercutting was undertaken in Goonyella system, with majority of kilometres west of Hatfield with good possession and daily production. Approx. 19km was undercut on the Newlands System with good track possession and good daily production.
2004/05	50	76.987	0	Completed 21.120km on Mt Isa line which is not included in the totals. Large sections of undercutting were completed on Branch lines in both Goonyella and Blackwater Systems, from Hatfield to South Walker Junction on Duplicated sections and a section on the Newlands System during their shutdown was completed. Average return of ballast was 55% with no total dump sections undercut.
2003/04	50	161.37	0	Both RM80 and RM900 Operating. RM80 stopped working Dec 2003. Completed 57.020km of UC on the non-coal network which is not included in the totals. Two machines working, 60 -70% return on ballast and good daily production rates, No areas of total dump. Completed large sections of undercutting in areas away from the ports.
2002/03	50	133.98	0	Both RM80 and RM900 Operating
2001/02	50	116.05	0	RM80 working and RM900 commenced September 2001

(1) Target levels for UT1 is 50 kilometres as per Working Paper 7. Target levels for UT2 are as specified in Table 10 of the maintenance DAU.

4.3.15 Maintenance Cost Index

The draft decision accepted QR Network's proposal to index its maintenance costs based on the MCI. It also considers that the proposed construction is reasonable to the extent that it is based on third party indices that are not subject to manipulation by QR Network. However, the QCA has expressed concerns with the composition of the index. In particular, it requires the application of a 15.9% weighting for asset charges, which are to remain constant for the term of the regulatory period.

In its response QR Network noted that the index must be consistent with the base maintenance costs to which it is applied. In meeting this objective, QR Network notes there are two possible approaches:

- Include asset charges as a constant in the index and apply the index to a base maintenance cost which includes asset charges at their forecast nominal values; or
- Include the nominal cost growth (reflecting changes in the underlying asset base) within the index and apply the index to the base maintenance cost inclusive of all costs expressed in 2007-08 dollars.

On consideration of the complexity of both approaches and to ensure there remains a link to costs as reported in the GHD report and the draft decision, QR Network has elected to include the nominal cost growth of asset charges in the index.

Consistent with the removal of the spoil management wagons from the maintenance cost allowance the asset charge weighting in the MCI has been reduced from 15.9% to 9.1%.

The resultant MCI is based on the index component values included in the response to the draft decision and reflecting the cost forecasts (excluding accommodation) included in the BIS Shrapnel report on Forecasts of Key Components of QR Network's Maintenance Cost Index included at Appendix B to the response to the draft decision. The index has been rebased to the year 2007-08 as shown in Table 4.19.

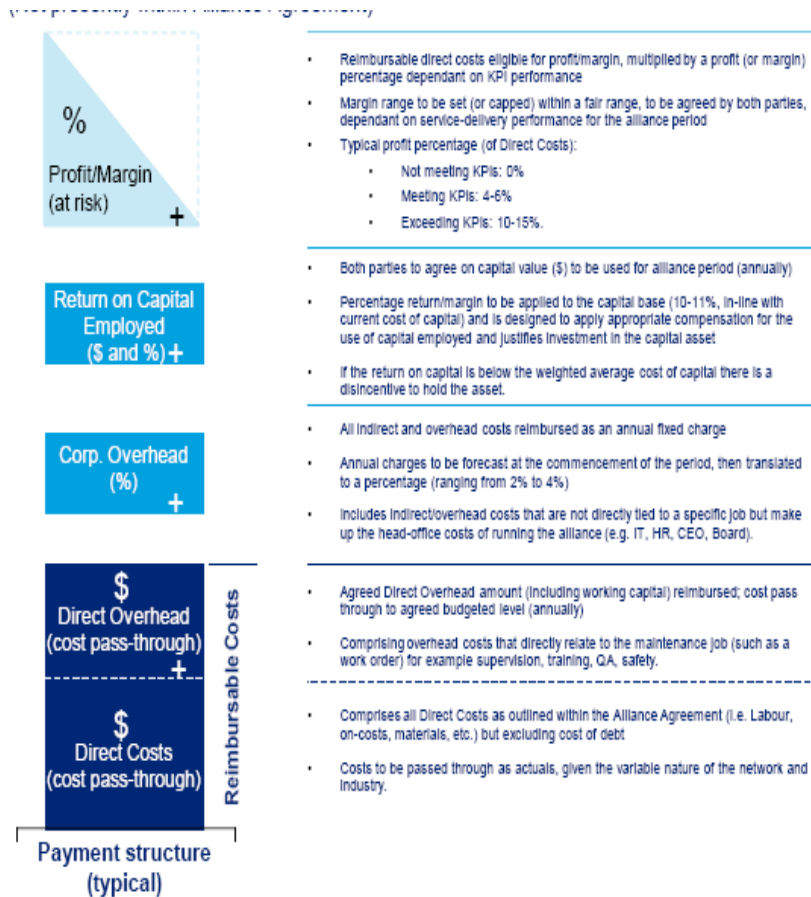


Figure 4.5 - Typical Maintenance Alliance Structure

Table 4.20 - 2010 Proposed Maintenance Costs for the CQCR

Maintenance Costs (\$2007-08)	2009/10	2010/11	2011/12	2012/13
Ballast undercutter				
Mechanised Resleeping				
Mechanised Resurfacing				
Rail Grinding - Mainline				
Rail Grinding - Turnouts				
Track Geometry Recording (RRV)				
Track Geometry Recording (UGMS)				
Ultrasonic Testing Ontrack Machine				
Track, structures and facilities				
Trackside systems				
Traction				
Direct Total	\$136.03	\$138.78	\$140.96	\$141.16
add Corporate overhead (5.75%)	\$7.82	\$7.98	\$8.10	\$8.12
Subtotal	\$143.85	\$146.76	\$149.06	\$149.28
less Asset Charges	\$11.64	\$11.89	\$14.82	\$14.70
Subtotal	\$132.21	\$134.87	\$134.24	\$134.58
add Margin (5%)	\$6.61	\$6.74	\$6.71	\$6.73
add Asset Charges	\$11.64	\$11.89	\$14.82	\$14.70
Total	\$150.46	\$153.50	\$155.77	\$156.00
Adjustment non coal	\$2.76	\$2.86	\$2.95	\$3.04
MCI	108.27	111.20	115.29	121.85
Maintenance Costs Nominal	2009/10	2010/11	2011/12	2012/13
Ballast undercutter				
Mechanised Resleeping				
Mechanised Resurfacing				
Rail Grinding - Mainline				
Rail Grinding - Turnouts				
Track Geometry Recording (RRV)				
Track Geometry Recording (UGMS)				
Ultrasonic Testing Ontrack Machine				
Track, structures and facilities				
Trackside systems				
Traction				
Corporate overhead	\$8.47	\$8.87	\$9.34	\$9.89
Margin	\$7.16	\$7.50	\$7.74	\$8.20
Total (excl non coal)	\$162.90	\$170.70	\$179.58	\$190.09
Adjustment for non coal	\$2.99	\$3.18	\$3.40	\$3.70
Total (incl non coal)	\$159.91	\$167.52	\$176.18	\$186.39

4.3.17 Reference Tariffs

This section outlines the Maximum Allowable Revenue calculated from the cost build-up and the resulting Reference Tariffs for both:

- Central Queensland Coal Region
- Western System

4.4 CENTRAL QUEENSLAND COAL REGION

The inputs to the reference tariffs above result in the following calculation of Maximum allowable revenue (MAR) on a system basis for both electric and non-electric assets.

Table 4.21 - UT3 CQCR Maximum Allowable Revenue – Non-Electric Assets (\$m)

System	2009-10	2010-11	2011-12	2012-13
Blackwater (including Rolleston and Minerva)				
Opening Asset Value	1,323,234	1,363,171	1,370,268	1,369,507
Capital Expenditure	62,700	33,100	28,200	25,300
Return on Capital	146,433	149,150	149,652	149,413
Less Inflation	33,860	34,490	34,607	34,552
Depreciation	56,622	60,493	63,569	66,530
Maintenance Costs	56,990	60,517	61,250	66,500
Regional & System Wide Costs	25,437	26,094	27,176	27,916
Tax	7,115	10,749	12,648	12,916
Total MAR	258,737	272,512	279,688	288,710
Goonyella (including Hail Creek and Moorvale and Vermont)				
Opening Asset Value	1,132,316	1,400,019	1,419,151	1,442,934
Capital Expenditure	289,700	47,500	55,800	21,400
Return on Capital	138,064	153,912	156,428	157,140
Less Inflation	31,907	35,591	36,172	36,339
Depreciation	53,904	63,958	68,189	71,883
Maintenance Costs	69,849	72,161	77,347	79,885
Regional & System Wide Costs	25,835	27,044	28,719	29,128
Tax	5,924	8,167	12,474	13,145
Total MAR	261,666	289,651	306,986	314,842

System	2009-10	2010-11	2011-12	2012-13
Moura				
Opening Asset Value	253,405	252,623	258,431	258,779
Capital Expenditure	1,600	8,600	3,600	1,300
Return on Capital	27,480	27,774	28,131	28,045
Less Inflation	6,355	6,422	6,505	6,486
Depreciation	8,737	9,214	9,758	10,128
Maintenance Costs	12,422	12,666	13,716	14,506
Regional & System Wide Costs	4,766	4,909	5,164	5,239
Tax	275	2,294	2,241	2,383
Total MAR	47,326	50,434	52,504	53,815
Newlands				
Opening Asset Value	165,374	163,815	163,062	201,274
Capital Expenditure	1,300	2,400	42,200	1,500
Return on Capital	17,947	17,838	19,908	21,839
Less Inflation	4,150	4,125	4,601	5,050
Depreciation	7,009	7,278	8,589	9,937
Maintenance Costs	9,718	10,717	11,979	13,026
Regional & System Wide Costs	5,248	4,981	5,324	5,998
Tax	1,412	1,962	1,551	1,139
Total MAR	37,184	38,651	42,751	46,889
TOTAL CQCR Maximum Allowable Revenue – Non-Electric Assets				
Opening Asset Value	2,874,329	3,179,627	3,210,913	3,272,493
Capital Expenditure	355,300	91,600	129,800	49,500
Return on Capital	329,923	348,674	354,120	356,437
Less Inflation	76,272	80,629	81,885	82,427
Depreciation	126,273	140,943	150,105	158,478
Maintenance Costs	148,976	156,062	164,291	173,918
Regional & System Wide Costs	61,286	63,027	66,383	68,268
Tax	14,727	23,171	28,914	29,582
Total MAR	604,914	651,248	681,928	704,256

Table 4.22 - UT3 CQCR Maximum Allowable Revenue – Electric Assets (\$m)

System	2009-10	2010-11	2011-12	2012-13
Blackwater				
Opening Asset Value	147,917	150,839	216,989	347,888
Capital Expenditure	15,500	80,700	149,300	51,100
Return on Capital	16,828	20,668	31,527	40,369
Less Inflation	3,890	4,774	7,279	9,332
Depreciation	16,468	19,324	25,680	31,489
O&M Costs	14,284	15,667	16,245	48,945
Tax	3,851	4,656	3,058	0
Total MAR	47,541	55,542	69,230	111,471
Goonyella (including Hail Creek and Vermont)				
Opening Asset Value	201,533	248,018	249,086	260,379
Capital Expenditure	57,200	13,400	24,900	44,400
Return on Capital	24,878	27,535	28,272	30,547
Less Inflation	5,749	6,367	6,536	7,061
Depreciation	16,464	18,699	20,144	22,417
O&M Costs	27,582	37,226	39,642	41,509
Tax	2,890	2,199	3,251	3,031
Total MAR	66,065	79,293	84,773	90,443

TOTAL CQCR				
Opening Asset Value	349,450	398,857	466,075	608,267
Capital Expenditure	72,700	94,100	174,200	95,500
Return on Capital	41,706	48,203	59,799	70,916
Less Inflation	9,639	11,140	13,816	16,393
Depreciation	32,932	38,023	45,824	53,906
O&M Costs	41,866	52,893	55,887	90,454
Tax	6,741	6,855	6,309	3,031
Total MAR	113,605	134,834	154,003	201,914

The proposed MAR numbers are deconstructed for the purpose of creating reference tariffs based on the forecast volumes. QR Network's proposed UT3 reference tariffs are shown below. The main difference in the tariff construction in the 2010 DAU is the removal of a single AT5 tariff component applicable to both the Goonyella and Blackwater systems. These now have a specific system AT5 electrical energy tariff amount.

Table 4.23 - Proposed UT3 Base Reference Tariffs Exclusive of Revenue Cap Adjustments for 2007/08 and 2008/09 (\$)

	2009-10	2010-11	2011-12	2012-13
Blackwater^a				
AT ₁	0.78	0.80	0.82	0.84
AT ₂	1,829	1,875	1,922	1,970
AT ₃	4.46	4.57	4.69	4.81
AT ₄	1.50	1.54	1.58	1.62
AT ₅	4.31	4.42	4.53	4.64
EC	0.62	0.69	0.70	0.79
Goonyella^b				
AT ₁	0.54	0.55	0.57	0.58
AT ₂	1,159	1,188	1,218	1,248
AT ₃	4.55	4.66	4.78	4.90
AT ₄	0.98	1.00	1.03	1.05
AT ₅	1.90	1.95	2.00	2.05
EC	0.62	0.69	0.70	0.79
Moura				
AT ₁	1.45	1.49	1.52	1.56
AT ₂	548	562	576	590
AT ₃	9.97	10.22	10.48	10.74
AT ₄	1.24	1.28	1.31	1.34
Newlands				
AT ₁	1.51	1.55	1.59	1.63
AT ₂	245	251	257	264
AT ₃	6.24	6.40	6.56	6.72
AT ₄	0.89	0.91	0.93	0.95

a A System Premium will be applied to Rolleston and Minerva, and a System Discount to Stanwell

b A System Premium will be applied to Vermont

Table 4.24 - Proposed UT3 Reference Tariffs Inclusive of Revenue Cap Adjustments for 2007/08 and 2008/09 (\$)

	2009-10 ^c	2010-11 ^d	2011-12	2012-13
Blackwater^a				
AT ₁	0.78	0.80	0.82	0.84
AT ₂	1,829	1,875	1,922	1,970
AT ₃	4.68	4.41	4.69	4.81
AT ₄	1.58	1.49	1.58	1.62
AT ₅	4.78	5.62	4.53	4.64
EC	0.62	0.69	0.70	0.79
Goonyella^b				
AT ₁	0.54	0.55	0.57	0.58
AT ₂	1,159	1,188	1,218	1,248
AT ₃	4.86	4.81	4.78	4.90
AT ₄	1.04	1.03	1.03	1.05
AT ₅	2.20	2.24	2.00	2.05
EC	0.62	0.69	0.70	0.79
Moura				
AT ₁	1.45	1.49	1.52	1.56
AT ₂	548	562	576	590
AT ₃	9.97	10.72	10.48	10.74
AT ₄	1.24	1.34	1.31	1.34
Newlands				
AT ₁	1.51	1.55	1.59	1.63
AT ₂	245	251	257	264
AT ₃	7.74	6.96	6.56	6.72
AT ₄	1.10	0.99	0.93	0.95

- a A System Premium will be applied to Rolleston and Minerva, and a System Discount to Stanwell
- b A System Premium will be applied to Vermont
- c The 2009/10 Proposed UT3 Reference Tariffs are inclusive of the 2007/08 Revenue Cap Adjustment
- d The 2010/11 Proposed UT3 Reference Tariffs are inclusive of the 2008/09 Revenue Cap Adjustment

4.5 WESTERN SYSTEM

4.5.1 Background

The following is the Resubmission of QR Network's Western System UT3 Undertaking to the QCA outlining QR Network's development of its proposed UT3 Reference Tariff structure for Coal Carrying Train Services on the Western System within the SEQ cluster.

Section 1.13 of the QCA's Draft Decision responded to QR Network's original submission of its Western System Coal Tariff Development paper. QR Network had some specific concerns regarding some of the assumptions underpinning the QCA's Draft Decision, in particular those contributing to Decision 1.5.

In summary, QR Network drew issue with:

- The capacity-based optimisation of its DORC
- Everything Infrastructure's view on the suitability of an MEE standard
- Reductions in unit prices; and
- Nominal percentage splits of assets for modelling purposes.

QR Network was principally concerned with the resultant commercial uncertainty and the potential for disputes arising from the application of non-coal allocators to infrastructure enhancements subject to Access Facilitation Deeds (AFD). QR Network has subsequently taken AFD supported assets out of the optimisation regime, rendering the capital expenditure 100% claimable.

QR Network re-engaged Aurecom Hatch to objectively review the assessment and the reasonableness of the conclusions of Decision 1.5, to provide advice and help to establish an appropriate DORC value that addressed some of the concerns of the QCA, and to deliver a final value that best represents state and purpose of the infrastructure within the system.

The reductions in system wide operating costs in Decision 1.6, while logical in their approach, seemed to have been made without consideration of the reasonableness of the results implied. QR Network questioned the compatibility of the QCA decision with the stand-alone cost principle. Accordingly QR Network maintains that its original operating cost forecast is reasonable.

Decision 1.7 of the Draft Decision listed several changes to the original maintenance cost submission. QR Network considered the conclusions made in the Everything Infrastructure report to be unreasonable, not referencing the principles of the original build up, the state of economic recovery in markets, and the unique constraints in the system, such as the prevalence of labour as opposed to machinery for works. Accordingly QR Network has resubmitted its original cost claim, escalating them to nominal dollars.

Subsequently, QR Network has redeveloped its building blocks model which it believes addresses these concerns, and satisfies the QCA's underlying policy issues, that can form the basis for future regulatory decision making.

4.5.2 Ceiling Price Methodology

QR Network has sought to reapply the building blocks methodology to redevelop a ceiling price for Western System Reference Tariffs, which requires determination of:

- an opening asset value, based on the DORC methodology;
- volume forecasts;
- return of capital;
- return on capital;
- maintenance cost forecasts; and
- system-wide and regional cost forecasts.

The key inputs are examined below.

4.5.3 Capital expenditure

Coal Related CAPEX

QR Network carries out infrastructure enhancements in line with required demand through communication with supply chain participants and in line with external capacity constraints. The challenge in the Western System has always been to increase the availability of train paths for coal carrying services down the Toowoomba Range and through the congested Brisbane metropolitan area, and to do so in a cost effective way.

As the pricing model is for coal traffics only, only coal-related CAPEX and the allocations of QR system-wide and Western System wide CAPEX has been considered. As coal is the predominate traffic over the line section between Rosewood and Macalister and coal traffic is the longest and heaviest traffic the majority of CAPEX in the Western System is coal related.

QR Network has applied a similar approach to expressing the forecasted UT3 CAPEX in the Western System to that for the CQCR. For the CQCR, QR Network is required to develop a Capital Indicator that reflects the forecast capital expenditure per system over the UT3 period. QR Network has presented this capital indicator using a smoothed approach.

QR Network has replicated this approach to expressing the forecasted UT3 CAPEX in the Western System. Both coal specific capital expenditure and a share of system wide capital projects relevant to the Rosewood – Macalister section have been included in the derivation of the Western System Capital Indicator. Construction interest associated with these projects has also been allowed for.

The table below shows the forecast CAPEX for the western system over the UT3 period:

Western System Coal Capital Expenditure Forecast	2009/10	2010/11	2011/12	2012/13
UT3 Forecast CAPEX	4,100	40,100	4,100	4,100

This CAPEX is to be claimed at its full value, and is not subject to optimisation through train path allocation.

Allocation of CAPEX to Western System Coal

Allocation of costs of QR system-wide projects has been calculated as follows:

- An 18% allocation of full project cost has been applied to the entire Western System as per the QCA endorsed QR Network Costing Manual.
- For non telecommunications projects this 18% has been further split by 50% train kilometre and 50% GTKs.
- For telecommunications projects this 18% has been further split by 75% train Km + 25% Route Km.

This approach is consistent with the methodology used in QR Network’s 2006/07 Capital Expenditure claim subsequently approved by the QCA.

4.5.4 Opening Asset Value

The Opening Asset Value for resubmission adheres to the following principles:

- As per Section 10.2 of AH’s Peer Review, adopt a reassessed DORC Value of \$350 million at 1 July 2007 for Rosewood to Macalister.
- All AFD-Supported, Rebate Assets separated out and included in the build-up
- QR Network has not included any assets from the Columboola line section into the Opening asset Value;
- The residual deducted at 75.6% (representative of coal train paths through the Western System).

This approach results an opening asset value for assets included in the DORC valuation at the valuation date (1 July 2007) of approximately \$264m as at 1 July 2009 (excluding those capital expenditure in 2007/08 and 2008/09 as per QR Network original submission). When these amounts totalling \$27.5m are included in the asset roll-forward this produces an opening regulatory asset value for coal carrying train services at 1 July 2009 of \$291.6m. These adjustments are shown in Table 4.25 and 4.26.

Table 4.25 - Western System DORC Valuation at 1 July 2010

Asset	DORC (\$ August 2007)	Avg. Weighted Remaining Life
Track	\$186,960,000	21.0
Signals	\$9,540,000	9.5
Bridges	\$39,020,000	25.3
Culverts	\$9,340,000	25.0
Earthworks	\$2,370,000	5.0
Tunnels	\$85,740,000	50.0
Land Acquisition	\$552	2.5
Telecom	\$15,350,000	10.0
Land	\$330,000	-
Power Systems	\$1,370,000	9.7
Sub-Total	\$350,020,552	

Table 4.26 - Opening Regulatory Asset Value for Coal Carrying Train Services

	Full Value (\$M)	Discount Factor	Optimised (\$M)
DORC	341.51		
Pre-95 assets	291.39	75.54%	220.13
Post-95 Capex	24.72	75.54%	18.67
AFD	25.34	100%	25.34
Adjusted DORC			264.13
Add Incremental Capex	27.45	100%	27.45
Optimised O.A.V			291.59

4.5.5 Cost of Capital

QR Network has applied the cost of capital determined for CQCR to apply in the UT3 period. As QR Network is not seeking to apply the ceiling rate derived from the building block maximum allowable revenue any change in the cost of capital will be recognised as a variation to the relativity against the theoretical ceiling price.

4.5.6 CPI and Depreciation

The CPI index for Brisbane has been used to inflate or deflate values.

Consistent with the approach to estimating remaining asset lives in the CQCR, the Western System remaining assets lives are either the lower of their remaining physical life or an economic life of fifty years. Depreciation is based on the straight line methodology.

4.5.7 Operating Costs (OPEX)

In seeking to reflect the actual cost of its business QR Network has taken the following approach to the cost build-up of its SWR costs:

$$\begin{aligned}
 \text{Actual Cost} = & \text{Direct coal activity costs (regional) +} \\
 & \text{Direct coal costs (system-wide) +} \\
 & \text{Refined allocated costs (regional and system-wide) +} \\
 & \text{Default allocation of cost (System-wide)}
 \end{aligned}$$

Direct costs

QR Network has taken costs directly attributable to Western System coal and this is shown against the relevant activity's cost centres. The type of activity, staff and consumables for these activities has been examined and the future impacts on the area have been considered in determining future staffing and cost efficiency.

Refined allocated costs

Where a team/unit performs tasks that are not completely coal related (for instance, Regulation and Policy) an attribution has been performed based on the amount of activity that is performed for the coal network. This information has been provided by the relevant Managers within each area.

Default allocators

Where there is minimal information about the underlying nature of the cost allocation, this is allocated based on default allocators using the methodology that was previously established in the QR Network Costing Manual.

System-Wide

QR Network deemed the resultant \$2.5 million per annum operating cost allowance as per the Decision to be materially deficient, not providing sufficient revenue required to meet the efficient costs of providing coal carrying train services in the Western System. Therefore, QR Network has including its original operating cost claim adjusting for changes in the inflation rate and working capital.

The allocation of costs to Western System coal was based on the mid-point system-wide standard cost allocator for the Moura and Newlands systems (excluding GAPE) as per the original submission.

Risk Premium

QR Network has included a risk premium amount consistent with the allocation method applied in the CQCR. This risk premium is intended to provide an appropriate cash flow allowance for the cost of insurance and self-insurance against particular risks and the inclusion of pass-through provisions against other risks that are assessed as having a low probability but high cost. The Western System risk

premium has been derived by applying the risk premium calculated for the Moura System to a GTK rate OF \$0.13 per '000 GTK

Working Capital

In UT1 the QCA estimated a working capital requirement for QR Network as being approximately 0.3% of total revenue. The approved allowance in UT2 was also estimated on this basis. QR Network has therefore estimated its UT3 working capital allowance based on this assumption.

UT3 Forecast OPEX

The table outlines the Western System Coal OPEX costs for the UT3 period as per QR Network's original submission.

Table 4.27 – Western System Operating Costs (\$)

	2009/10	2010/11	2011/12	2012/13	Total
Regional Costs	1,425,927	1,531,040	1,649,032	1,690,258	6,296,257
System Wide Costs	1,405,495	1,349,926	1,558,858	1,623,725	5,938,004
Risk Premium	233,355	280,253	323,587	323,587	1,160,783
Working Capital	15,207	18,457	21,871	22,418	77,953
Total Allowance (Submission)	3,079,985	3,179,675	3,553,349	3,659,988	13,472,997

4.5.8 Maintenance

As discussed in QR Network's Response to the Draft Decision, here are a summary of the issues pertaining to the proposed Maintenance allowance by the QCA:

- EU's report assumed deductions in uplifts which were not actually included in the cost build-up
- Maintenance activities on the Western System are highly labour intensive
- Short term variations in input prices correspond to longer term structural adjustments
- Difference in cost build-up between CQCR and Western System does not substantiate like for like comparisons in weightings

Therefore, QR Network has reverted back to its original submission figures for Maintenance. These numbers have been inflated to nominal dollars.

Table 4.28 – Western System Maintenance Costs (\$)

	2009/10	2010/11	2011/12	2012/13	Total
Track (excl Mech. Resleepering)	6,643,258	6,287,243	6,475,919	6,034,427	25,440,848
Mech. Resleepering	10,739,815	-	-	-	10,739,815
Trackside Systems	1,466,758	1,476,991	1,473,760	1,470,704	5,888,213
Facilities	-	-	-	-	-
Structures	2,419,128	1,170,052	1,848,155	998,948	6,436,283
Sub-Total	21,268,958	8,934,286	9,797,834	8,504,079	48,505,158
<i>Add ISG Margin and ROA</i>	<i>786,951</i>	<i>330,569</i>	<i>362,520</i>	<i>314,654</i>	<i>1,794,691</i>
Sub-Total (Submission)	22,055,910	9,264,855	10,160,354	8,818,730	50,299,849
<i>Add Inflation</i>	<i>1,007,840</i>	<i>665,561</i>	<i>1,002,147</i>	<i>1,112,032</i>	<i>3,787,580</i>
Total Allowance (Revised)	23,063,750	9,930,416	11,162,501	9,930,762	54,087,429

4.5.9 Volume Forecast

As there are only a limited number of mines in the Western System and system constraints governing available capacity there is more surety in forecasting tonnage volumes over the four year UT3 period than in the other CQCR systems.

As per the Draft Decision, the volume forecast has been sourced from the Coal Business team within QR Network and is a calculation of existing contracted tonnages and tonnes for which an Access Application has been received or is in negotiation. The forecast of tonnages are detailed in the following table.

Table 4.29 – Volume Forecasts (2009/10 to 2012/13)

Origin	Destination	Net Tonnes (mtpa)			
		2009/10	2010/11	2011/12	2012/13
Jondaryan	Swanbank Power Station	0.501	0.501	0.501	0.501
Ebenezer/Box Flat	Fisherman Island	0.194	0.194	0.194	0.194
Jondaryan	Fisherman Island	2.716	2.716	3.298	3.298
Wilkie Creek/Macalister	Fisherman Island	2.328	2.328	2.328	2.328
Columboola	Fisherman Island	-	0.923	1.358	1.358
Total		5.739	6.662	7.679	7.679

4.5.10 Maximum Allowable Revenues

QR Network's proposed System Allowable Revenue for each Central Queensland coal system is summarised in the following table.

Table 4.30 - UT3 WS Maximum Allowable Revenue – Non-Electric Assets (\$m) Ceiling

System	2009-10	2010-11	2011-12	2012-13
Rosewood to Macalister				
Opening Asset Value	291,560	288,413	320,223	314,784
Capital Expenditure	4,100	40,100	4,100	4,100
Return on Capital	31,740	33,345	34,838	34,250
Less Inflation	7,126	7,572	7,871	7,787
Depreciation	14,373	15,862	17,411	17,993
Maintenance Costs	23,350	10,054	11,301	10,054
Regional & System Wide Costs	3,118	3,219	3,597	3,705
Tax	1,269	7,060	9,192	9,992
Total MAR	66,724	61,969	68,469	68,208

4.5.11 Ceiling Price

To summarise, QR Network has analysed the ceiling price applicable to coal carrying Train Services in the Western System by considering the following building block elements:

- An estimate of the re-assessed asset value prepared for QR Network by AH January 2010, who determined a DORC value for the track sections of the Western System between Rosewood and Macalister;
- An estimate of the future coal specific capital expenditure for this section over the UT3 period;
- An estimate of the coal specific maintenance costs for this section over the UT3 period as per the original submission; and
- An apportionment of QR Network's forecast system wide and regional costs over the UT3 period including an allocation for both Cost of Risk and Working Capital as per the original submission.

Using this information, QR Network has redeveloped a ceiling price for mines emanating from the Surat Basin at:

- \$15.17/000gtk
- \$3,962 /train path

The unadjusted ceiling price reflects the Maximum Allowable Revenue (MAR) QR Network may be entitled to seek from coal traffics on the Western System.

As QR Network has not included Columboola assets in its RAB, railings from the line section will pay the equivalent Surat Basin two-part tariff. This will ensure an appropriate ceiling price is reached, and that works within the system are appropriately recovered.

Application of the two-part tariff will be assumed to be sufficient to cover any incurred costs within the line section.

In view of the above, QR Network is not proposing to seek the MAR at the ceiling price and to price at this level for UT3. Rather, QR Network accepts the QCA's Decision 1.8 and will set the price below the ceiling level.

4.5.12 Adjusted Ceiling Price (with deferred depreciation)

QR Network has, as per its response to the draft decision, back-loaded all depreciation on pre-1995 investments. QR Network cites Part 9, Division 6, Section 89 of the National Gas Rules (as at July 2009) pertaining to deprecation criteria deemed acceptable in a regime of price and revenue regulation. This approach seeks to promote efficient growth within a market and reduce resultant temporal tariff variations by deferring a proportion of depreciation (more aligned to economic depreciation and change in market value).

QR Network believes this approach will recognise the potential for future growth within the system. This profile may also be viewed as an incentive mechanism whereby it would be to QR Network's advantage to increase capacity to trigger depreciation on its sunken asset base, allowing it to recover further the full cost of its previous investments. The principles are also consistent the loss-capitalisation model proposed by ARTC in the draft HVAU where any inability to price at the level derived from the standard (straight line depreciation) building block model is capitalised for 'potential' recovery in future regulatory periods where volumes or market conditions support pricing closer to the unadjusted ceiling price.

While back-loading depreciation on pre-1995 assets was considered reasonable to reach Decision 1.8, given changes in inputs, such as the Cost of Capital, from the time of QR Network's response to the draft decision, the derived reference tariffs from this approach still exceed those of Decision 1.8.

Derived under-ceiling price for mines emanating from the Surat Basin at:

- \$9.13/'000gtk
- \$3,962 /train path

In the event that the QCA adjusts or adopts positions which differ from those assumed above the reference tariff in the draft decision represents a quasi floor price which should be met through adjustments in the depreciation amounts on pre-1995 investments.

4.5.13 Proposed Reference Tariff

QR Network proposes to reduce the reference tariff, below the adjusted ceiling price, with the recognition of the constraints of the system, setting as per Decision 1.8 for July 2009 at:

Coal services from Surat Basin and Columboola to pay a two-part tariff comprising an:

- AT₁ tariff of \$8.41/'000gtk; and
- AT₂ tariff of \$3,962/train path;

Coal services from Moreton mines, operating solely within the metropolitan system, to pay a single AT₁ tariff of \$16.81/'000GTK.

QR Network believes the proposed approach to deriving an adjusted ceiling price, set to Decision 1.8 provides greater commercial certainty and incentives for efficient utilisation of, and investment in the Western System.