

Submission to Queensland Competition Authority



Anglo American Metallurgical Coal Pty Ltd

July 2013

Contents

1	Executive Summary				
2	Risk F	ee Rate and the Market Risk Premium Discussion Paper	3		
3	Risk and the Form of Regulation Discussion Paper				
	3.1	The form of regulation effects a regulated entity's risk profile and asset beta	4		
	3.2	Form of regulation reduces Aurizon Network's risks	4		
	3.3	Form of regulation reduces DBCT's Management risks	7		
	3.4	Revenue cap regulation – impact on risk and incentives	9		
	3.5	Split cost of capital	10		
4	Regulatory Objectives and the Design and Implementation of Pricing Principles				
	4.1	Summary	10		
	4.2	The importance of non-economic goals and a balanced view of the QCA Act's requirements	10		
	4.3	Economic efficiency objectives	11		
	4.4	Optimal allocation of risk	11		
	4.5	UT3 and UT4: a case study of regulated risk allocation	12		
	4.6	Fairness objectives	14		
	4.7	Regulatory governance and practice	15		
5	Capacity Expansion and Access Pricing for Rail and Ports				
	5.1	Summary	15		
	5.2	Circumstances in which socialisation or incremental pricing are appropriate	15		
	5.3	Fairness in treatment of expansions – why that position is appropriate	16		
	5.4	Cost of access	17		
	5.5	Non-expansionary capital expenditure	17		
	5.6	Risks that a regulated network owner has in expansions	18		
	5.7	Specific examples – GAPE	18		
	5.8	Specific examples – Surat Basin Rail	18		
	5.9	Specific examples – pricing of electric traction services	19		
6	Sched	ule 1: QCA Approved Adjustment Charges - Aurizon	20		
7	Sched	ule 2: QCA Approved Adjustment Charges – DBCT	21		

1 Executive Summary

Anglo American Metallurgical Coal Pty Ltd (*Anglo American*) welcomes the opportunity to provide a submission in relation to the QCA's various pricing papers, including:

- (a) The Risk Free Rate and the Market Risk Premium, dated November 2012 (the RFR and MRP Paper);
- (b) Risk and the Form of Regulation, dated November 2012 (the *Form of Regulation Paper*);
- (c) Regulatory Objectives and the Design and Implementation of Pricing Principles (the *Objectives and Pricing Principles Paper*); and
- (d) Capacity Expansion and Access Pricing for Rail and Ports (the *Expansion Pricing Paper*).

In relation to the RFR and MRP paper, Anglo American supports the submission of the Queensland Resources Council (*QRC*).

In relation to the Risk and Form of Regulation Paper, Anglo American's views can be summarised as follows:

- (a) The form of regulation and ancillary risk reduction mechanisms are fundamentally relevant to the firm's cash flow and non-diversifiable risk and therefore to the firm's beta.
- (b) The revenue cap method of regulation is a guarantee that the firm will receive its full revenue, irrespective of volume risk to customers. As the access agreements with Aurizon Network do not impose strong and enforceable obligations to deliver capacity and are 100% take-or-pay (*TOP*), revenue cap regulation has the effect that Aurizon Network has no incentive to ensure the delivery of contracted capacity.
- (c) Revenue cap regulation also has significant disadvantages, including that:
 - (i) empirical evidence is that prices under revenue caps can be as high as monopoly prices;
 - (ii) there is no incentive to maximise throughput; and
 - (iii) there are few incentives to decrease costs.
- (d) Where a revenue cap is used, the beta should be at (or close to) zero for the following reasons:
 - (i) the revenue cap, particularly with under and over accounts, eliminates volume risk, some of which is non-diversifiable risk;
 - (ii) the ancillary mechanisms associated with a revenue cap (such as TOP contracts, cost pass throughs, pre-approvals of capex, access conditions and accelerated depreciation) all operate to further reduce the total risk, including non-diversifiable risk; and
 - (iii) to the extent there are regulatory lag issues with a revenue cap, there are mechanisms and regulatory practices which minimise these (for example, one-off payments or retrospective payments).
- (e) In relation to Aurizon Network Pty Ltd (*Aurizon Network*), there is no need for a higher Weighted Average Cost of Capital (*WACC*) on assets not yet included in the regulated asset base (*RAB*) because Aurizon Network has mechanisms (such as capex preapproval) which basically guarantee that the assets will not be optimised. This means that Aurizon Network has a risk profile which is substantially lower than most companies.

To the extent that there is some non-diversifiable risk which Aurizon is not compensated for, this can then be the subject of an access condition and approved by the QCA, meaning that access tariffs be based on a lower should WACC on only the existing RAB.

- (f) To date, the form of regulation and ancillary mechanisms applying to Aurizon Network and DBCT Management Pty Ltd (*DBCT Management*) have not been fully reflected in the asset beta applied by the QCA in its regulatory determinations applying to these two entities and, given the risk profile of Aurizon Network and DBCT Management, the QCA should either:
 - significantly reduce the beta and WACC applicable to Aurizon Network's and DBCT's Management RAB to recognise the lack of non-diversifiable risk faced by these entities (to just above or equal to zero); and
 - (ii) revert to price cap regulation.

Anglo American supports the conclusion that regulatory decisions (including on access pricing) need to meet 'fairness' objectives as well as economic efficiency objectives, and that the 'reference transaction' that the parties would have envisaged prior to incurring sunk costs is relevant to that assessment. It also supports the conclusion that efficient pricing requires optimal risk allocation between the parties and considers this is an issue that has been given insufficient attention in previous regulatory decisions, resulting in a flawed risk allocation where regulated infrastructure providers bear very limited (or no) risks but receive a return on investment which seems to assume they have retained material risks.

Anglo American has made, and continues to make, substantial investment decisions in the development of coal mines in the central Queensland coal region, and enters into long term arrangements for access with counterparties like Aurizon Network Pty Ltd (*Aurizon Network*) on the basis of regulated pricing. Consequently, Anglo American (like all other coal mine owners) faces the risk of being unable to respond to unanticipated access pricing changes due to past investments being sunk costs and its volume largely being locked in through long term take or pay contracts which simply pass through a pricing outcome.

Given that context, Anglo American considers that expansions that would substantially increase reference tariffs payable by existing users if expansion costs are socialised in the same manner as has traditionally been the case need to, as a matter of fairness, be priced separately. Where expansions which result in a small incremental increase (for example, due to minor upgrades to existing infrastructure) or decreases in tariffs the pricing should be socialised in the normal manner. If, however, increases are incurred through the connection of a new coal basin (eg, the completion of the Surat Basin Rail project or work in the Galilee Basin) Anglo American believes that these increases should be considered on a case-by-case basis. Each incremental increase related to a new basin can significantly affect existing users and alter the economic viability of individual mines and should be given particular consideration by the QCA. At the end of the process it is important to ensure that existing users are no worse off and that mine operations are not detrimentally impacted for the purpose of expansions or connections that existing users receive absolutely no benefit from.

While Anglo American will also make further submissions in respect of Aurizon Network's 2013 draft access undertaking (*UT4*) and the continuing processes related to Aurizon Network's existing access undertaking (*UT3*), it considers it is useful to try to settle a general approach to these matters before seeking to apply them to the specific circumstances to which UT4 is relevant.

2 Risk Fee Rate and the Market Risk Premium Discussion Paper

Anglo American supports the submission of the QRC in respect of the RFR and MRP Paper.

3 Risk and the Form of Regulation Discussion Paper

3.1 The form of regulation effects a regulated entity's risk profile and asset beta

In Anglo American's view the economic literature clearly supports the fact that the form of regulation should be taken into account in determining an asset's beta.

The form of regulation (for example, revenue cap vs price cap) and ancillary mechanisms (such as overs and unders accounts) applying to a regulated entity will have a direct impact on the level and variability of a regulated firm's revenues and costs. To the extent that this impacts on the non-diversifiable risk faced by the regulated firm, the form of regulation must have an impact on the regulated firm's beta used in the CAPM.

Where the form of regulation or ancilliary mechanisms change over time, such that the risk profile of the regulated entity changes, the firm's beta should also change to reflect the new risk position. This is particularly relevant where the regulatory framework (such as the terms of an access undertaking) changes from one access period to the next.

3.2 Form of regulation reduces Aurizon Network's risks

Existing form of regulation: UT3

Aurizon Network is currently subject (under its existing access undertaking: *UT3*) to a 'revenue cap' form of regulation, with an 'overs and unders account'. As identified in the Form of Regulation Paper, that form of regulation effectively provides Aurizon Network with a de facto guaranteed revenue requirement for its assets over the regulatory period, as the demand / volume risk is transferred to customers.

In addition to the principal form of regulation, there are a number of 'ancillary mechanisms' (both within UT3 and independently applied by Aurizon Network) which further reduce the total risk (both diversifiable and non-diversifiable) to Aurizon Network. The QRC submission does an excellent job of outlining all of the ancillary mechanisms benefitting Aurizon Network. In summary, these ancillary mechanisms are as follows:

- (a) UT3 is 100% take or pay for a number of the elements of the tariff (AT2, 3 and 4);¹
- (b) UT3 includes a process for customer pre-approval for the scope of capex and procurement strategy, which reduces the risk of capex / costs not being included in the RAB;²
- (c) UT3 provides for the payment of relinquishment fees where access rights are to be relinquished or transferred;³
- (d) UT3 includes a cost 'pass-through' adjustment where electric and connection costs vary by more than 2.5%;⁴
- (e) UT3 includes annual adjustments for a Maintenance Cost Index (which provides better alignment to Aurizon Network's actual costs) and an annual process which provides for a reconciliation between forecast and actual Maintenance Cost Index, and forecast and actual CPI;⁵

¹ Aurizon Network's 2010 Access Undertaking, Schedule F, Part B, clause 2.2.

² Aurizon Network's 2010 Access Undertaking, Schedule A.

³ Aurizon Network's 2010 Access Undertaking, clause 7.3.6.

⁴ Aurizon Network's 2010 Access Undertaking, Schedule F, Part A, clause 2.2.

 $^{^{\}rm 5}$ Aurizon Network's 2010 Access Undertaking, Schedule F, Part A, clause 2.2; see also schedule 1.

- (f) UT3 includes an annual process for resetting volume forecasts, to reduce the size of revenue cap unders/overs and therefore reduce cashflow timing differences;⁶
- UT3 allows accelerated depreciation of rolling 20 year asset lives for new capex; (g)
- (h) UT3 allows a review event where Aurizon Network prudently and efficiently incurs maintenance costs which exceed allowances by more than 2.5% (further, over the years the definition of 'review event' has been expanded to include any material change in circumstances that could lead to a variation in reference tariffs);⁷
- (i) UT3 allows a review event where Aurizon Network incurs costs in excess of \$1m as a result of certain Force Majeure events (for example, a review event was claimed in regard to the 2011 Queensland floods);8
- (j) Aurizon Network reduces its risk profile by seeking and obtaining 'access conditions' to reduce risk and/or increase returns for significant investments. This means that the risk profile which the regulated cost of capital must compensate for is the risk profile of the existing RAB, minor capital expenditure and operating activities (ie, the relevant risk profile for this assessment need not consider the risk of significant investments);
- (k) Aurizon Network is able to lodge draft amending access undertakings (DAAUs) and seek adjustments when risks are realised, or when the likelihood of realisation is perceived to increase. Examples include the DAAU for maintenance cost adjustments during UT2 and the Electric Traction DAAU during UT3. Customers do not have a similar right to seek adjustments using DAAUs;9
- (l) Aurizon Network is able to achieve additional risk transfer through the use of agreements with customers for which standard (regulator-approved) agreements do not exist. These include (as examples) agreements for:
 - (i) the funding of studies such as feasibility studies;
 - (ii) transfer facility licences;
 - relocation deeds; (iii)
 - (iv) level crossings;
 - (v) RIM and train control services on customer specific spurs; and
 - (vi) funding of customer specific spurs.

For example, Anglo American has had significant difficulty in negotiating ancillary services agreements (eg, Rail Relocation Deeds and transfer facility licences) where Aurizon Network was able to exercise a user take-it-or-leave-it approach on certain issues; and

- (m) Aurizon Network is able to reduce the risk of 'regulatory lag' by:
 - (i) undertaking endogenous review events under UT3;
 - (ii) taking advantage of cost pass-throughs for costs varying by more than 2.5%;

⁶ Aurizon Network's 2010 Access Undertaking, Schedule F, Part B, clause 3.

⁷ Aurizon Network's 2010 Access Undertaking, Schedule F, Part A, clause 2.2; see also schedule 1.

⁸ Aurizon Network's 2010 Access Undertaking, Schedule F, Part A, clause 2.2; see also the QCA's decision on 'QR Network's Review Event Submission - Central Queensland Flooding', dated October 2012; schedule 1.

⁹ See schedule 1.

- (iii) lodging DAAUs in respect of cost adjustments in circumstances where UT3 would not allow cost pass throughs, for example, the AT5 DAAU (Anglo American notes that customers do not have similar rights to seek adjustments using DAAUs);
- (iv) the timing of lodging access undertakings (for example, Aurizon Network has delayed the lodgement of UT4 and proposes to continue the current WACC parameters for the next year and then smooth any adjustment to the benefit of customers over the next regulatory period. This is the ultimate example of Aurizon Network benefiting from manipulating the timing of a review); and
- (v) significantly deferring the outcomes of required actions under UT3, avoiding obligations that it was required to consider over the last three years of UT3 regulation, for example SUFA, system rules and operating assumptions and alternate access agreement; and
- (n) even though the monthly TOP was waived during the force majeure event of the Australia Day 2013 flooding, TOP obligations are still compromised because after the recommencement of services there were speed restrictions which affected the abilty for services to be provided which has led to producers paying TOP.

These mechanisms enable Aurizon Network to retain the benefit from positive cost events whilst shifting at least some of the cost of negative cost events the customers.

Changes to the form of regulation: UT4

Aurizon Network has now submitted its proposed replacement access undertaking for the Central Queensland Coal Region Rail Network (UT4). It maintains the 'revenue cap' form of regulation, with an 'overs and unders account' and each of the UT3 ancillary mechanisms.

However, UT4 also goes much further, reducing non-diversifiable risk by (among other things):

- (a) removing the end of period condition assessment;
- (b) reducing the circumstances in which the RAB can be optimised by the QCA;
- (c) removing the requirement that access conditions must reasonably reflect the financial risks involved in providing access;
- (d) providing for effectively unfettered pricing in relation to investment in expansions;
- (e) effectively removing the (already weak) obligation to invest in expansions to rectify capacity shortfalls;
- (f) changing the customer-voting process (including being able to seek customer approval for prudency of standard) which makes it easier to require inclusion of investments in the RAB:
- (g) requiring the QCA to accept costs/variations as prudent where incurred in accordance with an approved procurement strategy in a wider range of circumstances;
- (h) reversing outcomes of Aurizon Network having certain risks under the existing regulatory framework in respect of ballast fouling, Gladstone destination take or pay issues¹⁰ take or pay disputes and audit costs;
- (i) reducing the depreciation period for UT1 and UT2 components of the RAB;

¹⁰ In particular see Aurizon Network's submission on the 2013 Draft Access Undertaking, volume 3, section 5.5. It appears that there has been a differentiation in Access Agreements describing port services for a specific terminal or just for 'the Gladstone area'. Where the agreement was to the 'Gladstone area' this had the effect of not utilising the producer's Train Service Entitlements. As such, Aurizon Network has waived take or pay on those paths, but is attempting to recoup that retrospective loss by socialising the cost of the lost paths into UT4 tariffs.

- (j) providing rights to increase the RAB by 'equity raising costs';
- (k) bringing 75% of the AT1 element of reference tariffs within the revenue cap;
- (I) changing the EC element of reference tariffs to a direct cost pass through;
- (m) socialisation of underrecovery of electric traction costs in the Blackwater system;
- (n) including in revenue cap adjustments:
 - (i) environmental compliance charges for non-compliance with the coal dust management plan;
 - (ii) differences in actual vs forecast audit costs; and
 - (iii) differences in maintenance costs based on changes in system forecasts;
- (o) introducing a greater number of review events; and
- (p) narrowing the definition of 'Network cause' (such that Aurizon Network can recover take or pay revenue in a wider range of circumstances when it fails to provide access).

The consequence of these additional changes to the UT3 arrangements is to immunise Aurizon Network from all material risks, whilst at the same time Aurizon Network seeks to increase its Market Risk Premium during the UT4 regulatory period. It is clear that to the extent any of these changes to the UT3 form of regulation and ancillary measures are adopted, the non-diversifiable risk of Aurizon Network would be less than it bore in UT3, and the resulting beta (and WACC) should be reduced accordingly; specifically to be equal to or just above zero.

Conclusions

The only conclusion that can be reached on a review of UT3 and the proposed UT4 is that, as a result of the form of regulation and associated ancillary mechanisms, Aurizon Network is largely insulated against non-diversifiable revenue risk (ignoring any lag effects) and asset stranding risk in respect of its central Queensland coal business. This in turn implies that Aurizon Network should only be entitled to a return that is equal to or slightly above the risk free rate (ie, the asset beta should be at or close to zero).

Anglo American notes that Aurizon Network's current regulated rate of return (or WACC) is 9.96% (proposed to be 8.18% in UT4), which is significantly higher than the risk free rate. Anglo American disagrees with this suggestion as the term of the access agreement is at least 10 years and are 100% TOP. Assuming that a revenue cap model is retained, then the rate of return should be substantially reduced to reflect the very low (or nil) risk faced by Aurizon Network.

3.3 Form of regulation reduces DBCT's Management risks

Like Aurizon Network, DBCT Management (as lessee of the Dalrymple Bay Coal Terminal (*DBCT*)) is subject to revenue cap regulation, ¹¹ with adjustments for over or under recovery. As previously identified, this methodology essentially provides DBCT Management with full revenue certainty, regardless of volume.

In addition to the revenue cap, DBCT Management has over the years sought to significantly decrease its risks through the incorporation of ancillary mechanisms in its access undertaking (**DBCT Undertaking**).

¹¹ Part A of Schedule C of the DBCT Undertaking. Interestingly, it was noted in the original QCA decision in respect of the 2006 DBCT Undertaking that one of the desirable qualities of the revenue cap form of regulation is that 'it provided DBCT Management with revenue certainty regardless of actual volumes and users with increased certainty in regard to capacity expansions'. [As it turned out the users did not get certainty in regard to capacity expansions and the 7X expansion was controversial and DBCT refused to proceed with the expansion for some period of time until the users agreed to its terms and conditions.]

These ancillary mechanisms include:

- (a) an asymmetric right to general reviews of the DBCT Undertaking, in that reviews occur approximately one and three years after the Commencement Date of the DBCT Undertaking, DBCT Management may seek a review if it considers it desirable, 12 but the QCA can only force an amendment to the DBCT Undertaking in the interests of the users to rectify a 'significant' inequity or unfairness which was not foreseen at the Commencement Date; 13
- (b) DBCT Management has the right to review the DBCT Undertaking to fix any issues arising because of the system capacity principles,¹⁴ the implementation of the Long Term Solution¹⁵ and where DBCT Management forms the conclusion that the access charge framework does not satisfy the pricing objectives:¹⁶
- (c) DBCT Management is not required to enter into an access agreement with a user unless the user provides such security as may be reasonably requested by DBCT Management. This limits the default risk faced by DBCT Management (though ultimately the default risk is removed by the revenue cap methodology anyway);
- (d) users are required to fund feasibility studies (FEL 1 and FEL 2) for expansions. If an expansion proceeds, users receive a rebate and the costs may be rolled into the RAB, allowing DBCT Management to earn a return on those amounts;¹⁸
- (e) the annual revenue requirement is determined annually, and may be adjusted at any time during the year where a Review Event occurs (including changes to reference tonnages and the completion of a terminal expansion). This reduces the size of any overs/unders and minimises any cash flow volatility/recovery lag issues;¹⁹
- (f) the QCA will be deemed to have accepted the need for a terminal capacity expansion where it has been approved by users in accordance with the '60/60 Requirement' (though acceptance of expansion costs into the RAB is still subject to certain prudence requirements);²⁰
- (g) the QCA is obliged to accept that capital expenditure (which does not relate to a capacity expansion) recommended by the operator is prudent and include it in the RAB provided that the capital expenditure does not exceed \$20 million per year (up to a total of \$110 million over the term of the DBCT Undertaking) and users do not object to the capital expenditure being incurred;²¹
- (h) the terminal infrastructure charge is levied on a 100% take or pay basis for each user's annual contracted tonnage, thereby limiting volume risk;²²

¹² Clause 1.4(a)(1) of the DBCT Undertaking.

¹³ Clause 1.4(a)(2) of the DBCT Undertaking.

¹⁴ Clause 1.4(b) of the DBCT Undertaking.

¹⁵ Clause 1.4(c) of the DBCT Undertaking.

¹⁶ Clause 1.4(d) of the DBCT Undertaking.

¹⁷ Clause 5.9(a) of the DBCT Undertaking.

¹⁸ Clause 5.10 of the DBCT Undertaking.

¹⁹ Clause 11.3(d), and clause 4 of Part A of Schedule C of the DBCT Undertaking.

²⁰ Clause 12.5(h)(4) of the DBCT Undertaking.

²¹ Clause 12.10(b) of the DBCT Undertaking.

²² Part A of Schedule C of the DBCT Undertaking, and clause 4.3 of the Standard Access Agreement.

- (i) where an access agreement is for expansion capacity, the access agreements entered into by users must be for a minimum term of 10 years. This provides DBCT Management with certainty beyond the regulatory period and minimises the optimisation risk;²³ and
- (j) the operation and maintenance charge (which covers the main variable costs incurred by DBCT Management) are recovered on a cost pass through basis (provided the costs are 'reasonably incurred or charged'). The operation and maintenance charge is paid in advance and reconciled quarterly, so any recovery lag is limited.²⁴ In practice, the QCA has never rejected a claim for maintenance costs.²⁵

The form of regulation and associated ancillary mechanisms that apply to DBCT Management mean that, like Aurizon Network, DBCT Management faces very little non-diversifiable revenue risk. Accordingly the regulated rate of return earned by DBCT Management under a revenue cap model should be equal to (or only slightly above) the risk free rate (ie, the asset beta should be at or close to zero)

3.4 Revenue cap regulation – impact on risk and incentives

As stated in the Form of Regulation Paper, revenue cap regulation effectively guarantees that a regulated firm will receive its revenue requirement over the regulatory period and transfers all volume risk to customers.²⁶ This means that the regulated firm faces very little risk of a revenue shortfall and should only be entitled to earn a return on its investment at the risk free rate.

In addition to reducing the risk faced by a regulated firm, there are a number of significant disadvantages to using revenue cap regulation. These include:

- (a) economic theory suggests that revenue caps can lead to prices at least as high as monopoly prices. For example, where customer volumes decline substantially the revenue cap is required to be spread over a smaller volume and as a result tariff levels rise (in practice, this has occurred in relation to Aurizon Network's AT5 tariff);
- (b) as it transfers volume risks to customers, revenue caps effectively eliminate incentives for the regulated firm to increase volume (that is, there is no incentive to increase throughput volumes if it will not result in the regulated firm being able to earn any additional revenue during the regulatory period for regulated services). As a consequence, the supply chain is not incentivised to promote efficiency; and
- (c) a lack of strong incentives to minimise costs, unlike with a price cap form of regulation, where a regulated firm has an incentive to reduce costs as it is entitled to retain the benefit of any cost reductions. To the contrary, the incentive is to maximise costs to the extent allowable under the prudency / approval framework, as a larger RAB means a larger return for the regulated entity. This has been indentified as an issue in other industries, such as electricity distribution and transmission, where it has been suggested that assets owners have pursued substantial capex expenses and driven up tariffs.

Anglo American is of the view that revenue cap regulation has meant that Aurizon Network and, at times, DBCT Management, have not had strong enough incentives to maximise throughput for their facilities. For example:

(a) it is generally acknowledged and understood that there is a misalignment between contracted capacity and poor communication between rail and port providers; and

²³ Clause 13.2(a) of the DBCT Undertaking.

²⁴ Clause 11.9 of the DBCT Undertaking, and clause 6 of the Standard Access Agreement.

²⁵ See schedule 2.

²⁶ Section 4.4.2, Form of Regulation Paper.

(b) users have found very little engagement from Aurizon Network and DBCT Management on related issues such as the central co-ordination of the supply chain to maximise throughput.

One possible approach for increasing the incentives for DBCT Management and Aurizon Network would be to revert to a price cap model. This would provide both entities with a strong incentive to reduce costs, maximise efficiency and maximise throughput. It would also insulate users against the possibility of monopoly pricing and provide the right incentives for the regulated entities to work harder to maximise coal supply chain alignment.

3.5 Split cost of capital

Anglo American agrees with the view that, once an asset has been rolled into the RAB, there is no, or very low, risk associated with revenue recovery and, for so long as such a 'guarantee' of the asset remains, all real equity risk and the relevant assets should earn the cost of the debt.²⁷

The argument put forward by economist Dieter Helm that non-RAB activities should earn a higher WACC, however, does not take into account the specific regulatory context in Australia. For example, in respect of Aurizon Network capex associated with an expansion on the Central Queensland Coal Network has little or no risk that it will not be rolled into the RAB for the following reasons:

- (a) Aurizon Network may significantly eliminate the risk of optimisation by seeking regulatory pre-approval of the capex from the QCA under clauses 3.1.1, 3.1.2 and 3.1.3 of schedule A of UT3:
- (b) Aurizon Network may alternatively significantly eliminate the risk of optimisation for scope by seeking customer pre-approval under clause 3.22 of UT3 (and has historically not made major investments unless it has such approvals); and
- (c) there is no example of the QCA having optimised the costs of an expansion.

Accordingly, while Anglo American believes that the split cost of capital concept may be worthy of further consideration, it believes that caution should be exercised in applying such a concept in the Australian context. Specifically, it does not follow that 'non-RAB' activities should automatically earn a higher WACC than RAB-related activities.

Anglo American discussed the limited risks that are actually borne by Aurizon Network and DBCT Management at 3.3 and 3.4 above.

4 Regulatory Objectives and the Design and Implementation of Pricing Principles

4.1 Summary

Anglo American generally supports the content of the QCA's Objectives and Pricing Principles Paper. Anglo American supports the development of high level principles to govern regulatory objectives and pricing principles that will guide development of more specific criteria in the future. This will only lead to greater regulatory certainty for providers and users alike.

4.2 The importance of non-economic goals and a balanced view of the QCA Act's requirements

For the regulated services relevant to Anglo American, the QCA makes its pricing decisions in the context of approving an access undertaking (or proposed amendments to an undertaking), such that the QCA may only approve the undertaking (including its reference tariffs or other pricing

²⁷ Form of Regulation Paper at 25.

principles) if it considers it appropriate to do so having regard to each of the matters in section 138(2) of the QCA Act.

Anglo American agrees with the QCA that a study of the QCA Act's provisions clearly demonstrates that the QCA is also required to have regard to a number of non-economic goals. In the context of section 138(2) of the QCA Act this can be seen particularly by reference to the public interest.

Anglo American considers that it is important for the QCA to recognise the balance that the QCA Act seeks to reach between having regard to both economic and non-economic goals, particularly in the context of recent submissions by Aurizon Network which have tended to ignore the reflection of those non-economic goals in section 138(2) and instead focus on the economic goals reflected in the pricing principles in section 168A (largely to the exclusion of other relevant factors).

This submission follows the structure of the Objectives and Pricing Principles Paper by considering the economic goals and then the non-economic or 'fairness' objectives.

4.3 Economic efficiency objectives

Anglo American generally agrees with the QCA's conclusions in the Objectives and Pricing Principles Paper that:

- (a) the role of a regulator whose objective is to promote economic efficiency in natural monopoly markets is to set prices, or provide the regulated firm with incentives to set prices, that achieve efficiency objectives;
- (b) the economic objectives including achieving allocative, productive and dynamic efficiencies;
- (c) price discrimination (that might otherwise be efficient) should not be permitted in markets where the access provider is vertically integrated into a downstream market due to concerns with the impact that will have on downstream market competition (noting that, for example, Aurizon Network is currently the largest coal haulage operator in the central Queensland coal region and is seeking to become involved in the development and operation of coal export terminals, such that price discrimination in the below rail access market is likely to have anti-competitive impacts in related 'upstream' and 'downstream' markets);
- (d) it is likely that customers of, and investors in, regulated entities place value on pricing stability (noting that the current revenue cap form of regulation applied under UT3 and proposed to be applied in UT4 provides overall pricing stability to Aurizon Network but pricing volatility to individual access holders);
- (e) achieving economic efficiency in a regulatory context involves achieving an optimal allocation of risk between the regulated infrastructure providers and access holders; and
- (f) in practice an efficient outcome will involve risk-sharing between the parties.

4.4 Optimal allocation of risk

As noted above, Anglo American agrees that achieving economic efficiency in a regulatory context involves achieving an optimal allocation of risk, which will typically mean that parties should share the risks in some proportion.

One of the key differences between a market for access to natural monopoly infrastructure and a competitive market is risk allocation. Anglo American agrees with the QCA that:

- (a) a natural monopolist will have ultimate bargaining power (and customers will face an asymmetric information issue in any negotiations) which is likely to create a sub-optimal risk allocation if the regulator does not intervene in risk allocation mechanisms, as (in the absence of regulatory controls over risk allocation) the regulated entity will be incentivised to pass on as much risk to its customers as it possibly can up to the point where those risks result in the access customer becoming unable to pay; and
- (b) regulatory pricing mechanisms affect the allocation of risk among stakeholders.

Anglo American considers that a critical aspect of optimal risk allocation not mentioned in the paper is that a party assumes those risks that it is best able to control or mitigate (rather than just reflecting a party's preferences for risk). This is a principle typically reflected in non-regulated commercial arrangements, and should be equally applicable in a regulatory environment. This principle reflects the fact that while contracting parties may both prefer not to assume risk, to the extent that they are required to, they will have a strong preference for assuming risks they have control over. That is; the willingness to bear risk is not a simple one size fits all measure (as the Objectives and Pricing Principles Paper seems to assume), but a measure that will vary according to the risk in question.

For example, as a general principle where losses are being caused by a party's conduct it will not be efficient for the other party to assume the risks or liabilities arising from that conduct. Only the party whose conduct is the cause is likely to be able to change its behaviour or gain insurance or identify cost efficient mitigation measures it can implement in respect of the relevant risk. A quick review of the Aurizon Network standard access agreements (both those existing under UT3 and those proposed under UT4) will confirm how far from this principle the regulated risk allocation has deviated.

In particular on the Central Queensland Coal Network producers' behaviour has been adversely affected by the use of revenue cap regulation as opposed to price cap regulation. Even though the international coal market is currently over-supplied and coal prices have decreased dramatically, producers still incur take or pay charges under the existing revenue cap regulation scheme. Because of the need to pay charges and meet long-term contracted capacity requirements, producers are mining and railing far more coal than is economically feasible or efficient in this economic climate in order to keep unit costs down. As such, the insistence by Aurizon Network on maintaining revenue cap regulation and take or pay charges while decreasing risks for Aurizon Network increases risks for producers and subsequently undermines the efficiency and competiveness of the entire Queensland coal market. It is unlikely that this same motivation would drive producers to continue mining excessive volumes if the Central Queensland Coal Network was regulated under a price cap mechanism.

To date Anglo American considers that this issue has been given insufficient attention in decisions regarding the terms (including pricing) of access to infrastructure regulated by the QCA. In particular, Anglo American considers that risk allocations are being set in a manner that is tilted too heavily towards access holders assuming all material risks (including risks relating to the regulated infrastructure provider's own conduct and risks relating to the conduct of other access holders and haulage providers). Yet that risk bearing position has not reduced the regulated entity's cost of capital in the manner that the QCA's recent discussion paper on 'Risk and the Form of Regulation' recognises that it should.

4.5 UT3 and UT4: a case study of regulated risk allocation

The QCA currently uses a number of pricing and non-pricing measures to regulate risk allocation. To take UT3 (and the proposed UT4) and related standard access agreements as an example of how access regulation (including pricing provisions) impacts on risk allocation, the following are key measures which result in risks being borne by access holders instead of Aurizon Network:

- a revenue cap with unders and overs mechanisms (that insulates the access provider from demand volatility or volume risk and results in that volatility/risk instead being socialised via pricing for future periods);
- (b) cost pass through rights (such as for 'Review Events' or 'Endorsed Variation Events' under Aurizon's access undertaking, sought to be expanded through other cost pass through events in UT4);
- (c) the very limited circumstances in which the RAB can be optimised by the QCA (sought to be further limited in UT4 which protects Aurizon Network from asset stranding risk while exposing continuing access customers to those risks in relation to infrastructure they may not even utilise but which happens to be in the same system);
- (d) access holders which are contracting capacity dependent on development of expansions having their capacity being conditional on the capacity created and consequently having the risk of capacity being reduced (such that despite the fact Aurizon Network controls the design and construction of the expansion, it is the access holders who bear the design and construction risk);
- (e) the liability and indemnity under approved standard access agreements (which nearly entirely exclude Aurizon Network's liability for delays to services and non-provision of access), particularly the limits on Aurizon Network's liability for non-provision of access, such as:
 - the 'Allowable Threshold' (which excludes liability until a specific percentage, generally 10%, of services have not been provided, now sought to be fixed at 10% in UT4);
 - (ii) only deducting from take or pay access not provided due to 'Aurizion Network Cause' which excludes where the non-provision of access is 'in any way attributable' to the conduct of an access holder or above rail operator (even if Aurizon Network is predominantly to blame for the non-provision), with further exclusions being sought in UT4;
- (f) permitting Aurizon Network to 'self-insure', but then:
 - (i) permitting Aurizon Network to subsequently seek adjustments to tariffs to recoup costs when such risks do eventuate; and
 - (ii) giving Aurizon Network a right to not reinstate or restore rail infrastructure destroyed or damaged by force majeure events which are 'self-insured' (such that access holders with coal mines have little choice but to act as de-facto insurers and fund the reinstatement):
- (g) the degree of security provided for in the standard access agreements (sought to be dramatically increased in UT4);
- (h) new measures being proposed in UT4 like passing on any 'under-recovery' of Blackwater system electric traction costs; and
- (i) in negotiations on ancillary services, such as Rail Relocation Deeds, requiring a 'zero risk' position for Aurizon Network, including grossed up tax indemnities, insurance of the relevant part of the asset by the coal producer (even though it is part of Aurizon's Network network) and full indemnities, including all costs.

This list is not intended to be exhaustive, but merely demonstrates the numerous provisions that combine to establish the overall risk allocation.

The combined effect of these various measures produces a risk allocation that is (as of UT3) heavily tilted so that of the access holder assumes the vast majority of material risks. It particular it often places access holders in the position of bearing substantial risks which arise solely or predominantly from Aurizon Network's own conduct. UT4 involves taking this to a new extreme where little (if any) material risks will be borne by Aurizon Network.

Further, this risk allocation is not fixed for a regulatory period, due to Aurizon Network's ability (and demonstrated willingness) to submit a draft amending access undertaking whenever it would otherwise be required to bear the consequences of assuming the very limited risks it carries under the contract, its own inefficient costs, or poor investment decisions. An example of this is Aurizon Network's recent Blackwater Draft Amending Access Undertaking which seeks to include its sunk investments in electric traction into a socialised AT5 tariff for all users, even those not getting benefit from electric upgrades. This impacts above rail operators (eg, Pacific National with significant investment in diesel rollingstock) and only results in Aurizon Network minimising the risk that it accepts for making a commercial decision to invest in electric upgrades even if the market was not requesting that development.

Anglo American considers that the existing risk allocation between Aurizon Network and access holders (both under the undertaking and approved standard access agreements) is fundamentally imbalanced and does not reflect an optimal risk allocation.

Anglo American considers that the QCA is now in a position in respect of UT4 where it should either:

- (a) fundamentally re-write the risk allocations (including by measures like changing pricing to a price cap and providing a material volume-based incentive mechanism, with both a 'bonus and penalty' regime); or
- (b) recognise the minimal levels of risks retained by Aurizon Network and reflect that in the pricing structure (ie, a substantially lower WACC closer to the risk free rate unless a more optimal risk allocation is provided for); or
- (c) or adopt a combination of both approaches.

4.6 Fairness objectives

Anglo American strongly supports the QCA's opinion that the QCA's role, as economic regulator, cannot be simply focused on economic principles and must include reference to 'fairness'. Anglo American also agrees that there are cases where the application of fairness principles is required in order to achieve economic efficiency.

In particular, efficient levels of investment (part of the objects of Part 5 of the QCA Act) will not occur if regulated suppliers and their customers (particularly where also user-funding infrastructure development) do not have confidence they will be treated fairly by the regulator in future regulatory decisions.

In this context, Anglo American acknowledges the importance of like customers being treated alike (the proportionality principle).

Anglo American also agrees that fairness is a relative concept that needs to be considered in the context of a 'reference transaction' (being a benchmark or the status quo). In the context of substantial investments in development of coal mines becoming sunk costs, Anglo American agrees that the relevant question is what principles all parties to a transaction would have agreed to before they made any sunk investments.

Where access agreements provide for pricing to occur on the basis of reference tariffs applicable under a relevant access undertaking, that strongly suggests there was likely to be an implicit

understanding between the parties as to the range of pricing outcomes that the QCA may approve in the future.

As the QCA discusses, principles of 'fairness' must be considered by the regulator when determining any tariff that is to be applied by the provider. Without some consideration of principles of fairness, users will be reluctant to make initial investments in expanding or extending existing lines and this may have the effect of creating a less competitive market or chilling efficient investment decisions.

4.7 Regulatory governance and practice

Anglo American agrees with the QCA's identified higher-order governance principles of credibility for investors, legitimacy for consumer in terms of being protected from monopoly power and transparency so that investors and consumers though protection. The second and third of those principles are of even higher importance where the regulated firm is vertically integrated into one or more upstream or downstream markets in which competition is impacted by access to the regulated service.

5 Capacity Expansion and Access Pricing for Rail and Ports

5.1 Summary

Anglo American agrees with the main premise of the Expansion Pricing Paper that regulation in respect of expansion pricing should have regard to the hypothetical case of what the parties would have agreed prior to having incurred sunk costs (the reference transaction).

Anglo American also agrees with the QCA's two key propositions (which apply where capacity is already committed to established users through long term take or pay contracts):

- (a) if average costs are decreasing substantially with capacity, adding the expansion costs to the cost base of the established capacity will provide an efficient and fair outcome; and
- (b) if average costs are increasing substantially with capacity, a separate access price should normally be calculated and charged to those whose demand for capacity underwrites the new tranche of capacity calculated to reflect the average cost of that new capacity.

However, Anglo American does not necessarily agree with the QCA's view that pricing of access to all major capacity expansions will need to be decided on a case by case basis. Anglo American has some concerns about how such a test might be applied.

Rather the relevant regulatory framework (primarily the applicable access undertaking) should set out a clear 'default' position even if there are particular cases where the QCA or customer vote should be able to determine an alternative cost allocation methodology.

5.2 Circumstances in which socialisation or incremental pricing are appropriate

Anglo American agrees with the QCA's position that if average costs are decreasing substantially with capacity, adding the expansion costs to the cost base of the established capacity will provide an efficient and fair outcome. However, it considers that to provide certainty and transparency that position should be enshrined in the relevant regulatory framework, rather than being left to be dealt with at the time of an expansion. It is difficult to see why existing users who underwrote the investment that made a cheaper incremental expansion of this nature possible should not always share in the benefits of the lower average pricing that such an expansion would bring.

Anglo American also agrees with the QCA's position that if average costs are increasing substantially with capacity, a separate access price should normally be calculated and charged to those whose demand for capacity underwrites the new tranche of capacity calculated to reflect the average cost of that new capacity. That position arguably should be able to be altered in

some circumstances, as it might be possible that one expensive expansion could unlock the potential for a series of cheaper incremental expansions. Anglo American considers that position should only be able to be altered by approval of the QCA or an overwhelming majority vote of existing customers for the relevant system. If such a regime was to be adopted Anglo American would make detailed submission on how any customer-voting on these matters should be structure.

There is obviously a position in between where there would be smaller (not substantial) changes in reference tariffs for existing users which would be caused by socialisation of all costs related to a new expansion. For minor increases it is again hard to see why existing users who underwrote the investment that made a cheaper incremental expansion of this nature possible should not always share in the benefits of the lower average pricing that such an expansion would bring. For minor increases, within the bounds of what an access seeker would have expected to occur in a negotiated contract prior to incurring sunk costs on a mine development, Anglo American accepts that it is reasonable they should be socialised. Again those positions should be enshrined in the relevant regulatory framework, rather than being left to be dealt with at the time of an expansion.

The critical task for the QCA, is therefore; to determine the appropriate threshold above which the costs of expansions are deemed to be so substantial that they should not be socialised. Anglo American considers it would be reasonable to set this using a test; such as expansion costs are socialised unless:

- (a) the expansion connects a new coal basin to an existing system (as such connections are, by their nature, only going to occur on the basis of a very substantial volume of coal, and therefore a very substantial step-change in the costs of access); or
- (b) the expansion would, if the costs were socialised, have the effect of increasing an existing customer's anticipated aggregate access charges by 20% or more.

5.3 Fairness in treatment of expansions – why that position is appropriate

Section 4.6 of this submission discusses the importance of fairness in regulatory decision making regarding pricing generally. This section seeks to discuss the fairness and appropriateness of the position described in section 5.2 of this submission in respect of access pricing of expansion capacity.

The coal chain infrastructure that is regulated fits the model the Expansion Pricing Paper describes as long term contracts for volumes (not price).

Anglo American supports the QCA's conclusions in the Expansion Pricing Paper that a primary fairness consideration in those circumstances is the pricing that parties would have agreed under a hypothetical situation where negotiations take place prior to any of the parties incurring a sunk cost. Mine development investment decisions involving substantial capital are made by parties on the basis of an implicit understanding of the likely pricing outcomes that the QCA may approve in future regulatory periods for the life of the mine. The QCA must; therefore, be very careful in permitting socialisation of expansion costs which exceed the anticipated range of pricing outcomes and damage the economic viability of mines (after the investment has become a sunk cost).

The clear concerns that coal companies have raised with Aurizon Network's proposals in respect of the Goonyella to Abbot Point Expansion (*GAPE*) and the Wiggins Island Rail Project (*WIRP*) are an indication that the substantial increases in access costs effectively forced through by Aurizon Network's refusal to invest without such conditions would not have been agreed in such a hypothetical situation.

As previously submitted by Anglo American in other submissions to the QCA, this issue is most evident where a new coal basin is being connected to an existing line or network. An existing

user, who has no interests in the new coal basin, would under a socialisation approach be paying significantly higher reference tariffs in circumstances where it will obtain no benefit from the upgrade and instead may suffer detriment from the impact of this increased tariff (and potential loss of capacity through misalignment of scheduling and operation between the rail infrastructure related to the new basin and the existing Aurizon Network system) on its existing operations. Further, the existing user has no control over imprudent expansions as it has no involvement in the operation or management of the expansion process and so may suffer from poor investment decisions based on poor analysis of the current financial or coal markets, poor design decisions and poor construction and cost management practices.

5.4 Cost of access

Anglo American strongly disagrees with some of the statements in section 3.2.3 of the Expansion Pricing Paper that suggest that the behaviour of an access seeker is unlikely to change significantly based on price as 'the cost of the access service makes up a small portion of the price of coal'.

First, the QCA will hopefully be aware that the statement that 'for quite some time it appears that coal has been providing high returns to coal miners' is not likely to continue to be the case. Coal prices are not what they once were. Costs in the Queensland coal industry remain high. Margins of coal producers are therefore tight even if the sales price is substantially higher than it was 10 years ago. The cancellation or slow-down in projects, job losses and office closures in the coal industry should provide solid evidence of the cost pressures currently facing the Queensland coal industry. At present, the economic conditions have resulted in the loss of well over 10,000 jobs in the mining sector.

Second, what is relevant (to considering a hypothetical situation before contracting) is the adverse impact increases in the cost of access have on the margin a potential coal producer expects to receive. Even if the percentage of access charges as a proportion of the sales price is minimal, if that removes any margin or reduces the margin to below the hurdle rate at which a mine investment would otherwise proceed, then it will clearly have had an adverse impact on demand for access.

Third, the example figures quoted in the Expansion Pricing Paper take a low cost port (DBCT) and reasonably low cost of access (presumably from a mine closer to the coast). Access for a more distant mine, or access utilising infrastructure on which Aurizon Network has required additional payments above the regulated return (GAPE and WIRP) will be far more costly (either on a dollar value or measured as a proportion of total costs), even where this impact is assisted by a common cost contribution to the system. Many producers also face higher handling charges at a higher cost unregulated port than those which would apply at DBCT.

Accordingly Anglo American considers the costs of access have a far greater impact on an access seeker's behaviour (where seeking to contract before the mine development is a sunk cost) than the QCA appears to have anticipated based, on somewhat misleading submissions provided on this point by Aurizon Network.

5.5 Non-expansionary capital expenditure

Anglo American accepts that there may be material capital expenditure required from time to time that is driven by general economic growth where it is not practicable to identify particular expansion capacity created by the expenditure (and therefore particular expansion customers who are responsible for 'causing' the expansion). Anglo American considers that it is an efficient and fair outcome for such capital expenditure to be socialised (subject to appropriate transparency and prudency requirements) on the basis that it is generally likely to only result in

minor increases in reference tariffs and users and the relevant regulated infrastructure provider would have agreed to that position if it was considered prior to investment decisions being made.

Of course, the QCA needs to be careful to ensure that a regulated infrastructure provider does not under/maintain the relevant infrastructure (on the basis that tariffs will include an assumed allocation for maintenance such that spending less on maintenance is a way of achieving additional revenue) and then impose costs on users in the name of a return on sustaining capital expenditure (which would not have been required if the infrastructure was properly maintained).

5.6 Risks that a regulated network owner has in expansions

Anglo American considers that it is not always simply a case of expansions being riskier for an infrastructure provider than operation of the brownfield network. Whether a network owner bears any material increase in risks in an expansion is highly dependent on the regulatory framework that applies. Anglo American will make detailed submissions on the UT4 issues in the UT4 process. However, it agrees with the QCA that three examples referred to in the Expansion Pricing Paper are instructive of the risks involved in expansion and investment decisions and the parties which are currently bearing those risks.

5.7 Specific examples - GAPE

Anglo American believes that GAPE was designed in a manner such that the interaction of GAPE traffic within Goonyella system traffic will result in a material loss of capacity on the Goonyella system.

That is an issue that is not even fully evident in the current environment where coal prices and usage of the system are depressed compared to expectations. However, when there is a return to higher demand conditions this will become a very evident risk that is socialised, as existing users will start being unable to schedule substantial numbers of trains ordered in accordance with their contractual entitlement. Under the proposed UT4 arrangements, Aurizon Network would have absolutely no obligation to invest in an expansion to rectify the capacity shortfall caused by its own investment, design and construction decisions.

Through the revenue cap, Aurizon Network will also be insulated from any resulting lower utilisation.

Consequently the risks that would normally be borne by an unregulated infrastructure provider (design and construction risks) will effectively be borne by access holders (including access holders on the Goonyella system who have no interest in or right to utilise the GAPE rail infrastructure).

Anglo American agrees with the QCA's assessment that a real issue is whether Aurizon Network has, in effect, reduced capacity on the Goonyella system in order to try to realise higher profits elsewhere. Behaviour of that manner is a key risk that the QCA needs to have regulatory oversight of in future expansions (particular if the QCA was in any way minded to allow an infrastructure provider potentially different investment returns on expansions).

5.8 Specific examples – Surat Basin Rail

As noted in the Expansion Pricing Paper, Anglo American objects to the potential for having to pay increased costs due to socialisation of upgrades to the Moura system which would be necessitated by the connection of the proposed Surat Basin Rail project (*SBR*).

At the time the investment was made in the Dawson project Anglo American was unlikely to have contemplated the potential substantial increase in costs relating to the Moura system becoming the access point for a new coal basin. This is not an incremental expansion, but is anticipated to more than double the throughput of the Moura system. It is possibly the starkest current example

of an impact on pricing that would never have been in other Moura system user's contemplation at the time they made coal mine investments.

Anglo American also has similar concerns to those now being revealed in GAPE; that the interaction of SBR traffic and Moura system tariff will result in a loss of capacity in the Moura system due to potential mismatches in scheduling or operation of SBR and the Moura system.

The QCA notes that the parties themselves may be in the best position to decide on access prices and how they are derived. However, Anglo American considers that even if that is true, users of the Moura system who would not use SBR will not have a 'seat at the table', such that they will be reliant on the QCA's oversight of pricing for the expansions of the Moura system itself to ensure they are not unfairly and adversely impacted.

5.9 Specific examples – pricing of electric traction services

Anglo American reiterates the concerns it raised in relation to Aurzion Network's 2012 and 2013 draft amending access undertaking regarding charges to electric traction related access charges.

There are numerous defects in those proposals (and the UT4 position which reflects the 2013 draft amending access undertaking on this issue), including the weaknesses in the total cost modelling relied on by Aurizon Network, the detrimental impact on competition in the above rail market and adversely impacting investment decisions made by haulage operators and end users on the assumption that electric traction pricing (and diesel pricing) would continue to be regulated in, consistent manner with how it has always been regulated (the 'reference transaction' to use the terminology from the QCA's pricing papers).

However, of most relevance to the pricing papers, the amendments seek to pass the risks arising from poor investment decisions made by Aurizon Network in the past onto haulage operators and end users. UT3 already has provisions which deal with this issue, by providing the ability to optimise the regulatory asset base if demand for utilisation of the electric traction infrastructure has 'deteriorated to such an extent that regulated prices on an unoptimised asset would result in a further decline in demand' (clause 1.4 of Schedule A of UT3). If optimisation was more readily applied, then there would be some argument for that risk to be taken into account in determining pricing for new expansions. However, if Aurizon Network is able to immunise itself from poor investment decisions through the revenue cap and avoid optimisation of its regulatory asset base by draft amending access undertakings of this nature then Aurizon Network bears none of the demand risk in respect of expansions.

6 Schedule 1: QCA Approved Adjustment Charges - Aurizon

Decision Decision Backdated Amount Amount Submissions								
Name	Date	То	Claimed (\$)	Recovered (\$)	Received			
Revenue cap adjustment 2006-07	20/03/2008	2006-07	25.5 million	25.5 million	3			
Revenue cap adjustment 2007-08	20/02/2009	2007-08	43.6 million	43.6 million	2			
Revenue cap adjustment 2008-09	19/11/2009	2008-09	28 million	28 million	3			
Adjustment charge 2009-10	29/10/2010	2009-10	161 million	161 million	0			
Adjustment charge 2009-10 (Queensland Rail not QRN)	25/11/2010	28/06/2010	\$14.16 million (including interest accrued)	14.16 million (including interest accrued	0			
Revenue cap adjustment 2009-10	21/04/2011	2009-10	-\$150,000	-\$150,000	2			
Endorsed variation event 2011	23/05/2011	2010	2010-11: \$0.77/'000egtk; 2011-12: \$0.81/'000egtk; 2012-13: \$0.88/'000egtk	All tariff changes approved	0			
Revenue cap adjustment 2010-11	00/06/2012	2010-11	49.2 million	49.2 million	2			
2012 review event – Central Queensland flooding	01/10/2012	01/09/2012	5.9 million (7.95 million with cost escalation)	7.95 million	4			
Endorsed variation event 2012	22/11/2012	01/11/2012	2012-13: \$0.81/'000egtk and other changes	All tariff changes approved	0			
Revenue cap adjustment 2011-12 (as Aurizon)	00/01/2013	2011-12	13.9 million	13.9 million	3			

7 Schedule 2: QCA Approved Adjustment Charges – DBCT

Decision Name	Decision Date	Applied From	Amount Claimed	Amount Recovered	Submissions Received
DBCT Short Gain Expansion	00/06/2007	01/09/2006	Increase ARR \$2,199,493, increase revenue cap \$2,163,092 and increase tariff to \$1.5096/tonne	Increase ARR \$2,199,493, increase revenue cap \$2,163,092 and increase tariff to \$1.5096/tonne	0
NECAP Expenditure	24/06/2010	2008/2009	\$1.3 million + \$0.016/tonne	\$1.3 million + \$0.016/tonne	0
WACC Update	02/10/2010	01/01/2011	9.86%	9.86%	3
QCA Fee Pass Through	21/07/2011	01/09/2010	\$1,179,438 plus increased tariffs	\$1,179,438 plus increased tariffs	0
Annual Revenue Requirement Increase	29/09/2011	01/01/2011	\$2,166,968	\$2,166,968	0
Outstanding Costs from DBCT 7x Expansion	00/12/2012	01/01/2012	\$4,524,288 plus increased tariffs	\$4,524,288 plus increased tariffs	0