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Dr Malcolm Roberts Chairman Queensland Competition Authority GPO Box 2257 Brisbane QLD 4001

10 June 2013

Dear Dr Roberts,

Aurizon welcomes the opportunity to provide feedback on Aurizon Network's 2013 Draft Amending Access Undertaking (2013 DAAU) for reform of the AT5 tariff arrangements in Blackwater.

As an independent train operator and an advocate for its customers, Aurizon strongly supports ongoing efforts to resolve the pricing issues associated with electric traction in Blackwater and views the proposal set out in the 2013 DAAU is an encouraging development in this lengthy process.

Aurizon believes it is essential that the Blackwater AT5 reflects only the efficient costs of providing access to the electric traction infrastructure in Blackwater, including that it should exclude the costs imposed on the system by the use of diesel traction. AT5 should also reflect the efficient use of the electric traction infrastructure, which, as for any high fixed cost asset, must assume a sufficiently high asset utilisation rate to realise the economies of scale available from electric traction.

While the diesel equivalent price is an important consideration in setting the level of AT5 to ensure electric traction remains competitive, it is more important to ensure that the AT5 price does not include costs that are not specifically related to electric traction.

The 2013 DAAU proposes that AT5 price will be fixed for eights years over which period it will recover the efficient costs of electric traction. The effect of the proposal to fix the AT5 price is to expose Auzion Network, access holders and users to risks associated with changes in the costs, volumes and market conditions over the period. Aurizon considers the treatment and allocation of those various risk is a critical element of any effective proposal for the AT5 arrangements in Blackwater.

In this respect, Aurizon seeks further information about the way in which the 2013 DAAU proposes to deal with these risks, including how changes in forecast costs will be managed, how the proposed under utilisation payment (UUP), should it be required, would be recovered (or refunded) to access holders and how Aurizon Network will be held accountable for its prudent decisions and efficient operation.



Aurizon notes that there are currently multiple overlapping processes for the treatment of AT5, namely this 2013 DAAU, the transitional tariffs to apply in 2013/14 under an extended UT3, and proposed UT4 pricing in the 2013 Draft Amending Undertaking (2013 DAU). This is causing uncertainty for producers and Aurizon, as an access holder, requests clarification about the status of each of these various AT5 price levels.

This will assist Aurizon to better understand the process and to continue to work with customers to ensure that their commercial interests are understood and promoted.

Should you have any queries, please contact Robin Laver on **Contract Sector** or Samuel McSkimming on **Contract Sector** 

Natalie Rose

Acting Senior Vice President Commercial and Planning





# Electric traction pricing in Blackwater - 2013 Draft Amending Access Undertaking



## Contents

EXEC	CUTIVE SUMMARY	. 3
Bai	lancing stakeholder interests - Risk	. 3
The	e proposed AT5 is not efficient and is too high	. 4
Re	view mechanism	. 4
Tin	ning and implementation of the UUP	. 4
Oth	her matters	. 5
1.		. 6
2.	Тне 2013 DAAU	. 6
2.1	Overview of the 2013 DAAU	. 6
2.2	Interaction of the 2013 DAAU with other regulatory processes	. 7
2.3	Aurizon's approach in responding to the 2013 DAAU	. 7
2.4	Structure of Aurizon's submission	. 8
3.	REQUIREMENTS OF THE QCA ACT	. 9
3.1	Volume and utilisation risk	. 9
3.2		
0,2	2 Treatment of other risks	11
4.	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU	
	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU	11
4.	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU	11 <i>11</i>
4. <i>4.1</i>	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU The proposed AT5 must be efficient The proposed AT5 is too high	11 11 13
4. <i>4.1</i> 4.2	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU The proposed AT5 must be efficient The proposed AT5 is too high The AT5 price path has no relief valves	11 11 13 15
4. 4.1 4.2 4.3	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU The proposed AT5 must be efficient The proposed AT5 is too high The AT5 price path has no relief valves The proposed UUP is potentially inequitable	11 11 13 15 16
4. 4.1 4.2 4.3 4.4	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU The proposed AT5 must be efficient The proposed AT5 is too high The proposed AT5 price path has no relief valves The proposed UUP is potentially inequitable The application of the UUP is unclear	11 11 13 15 16 17
4. 4.1 4.2 4.3 4.4 4.5	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU The proposed AT5 must be efficient The proposed AT5 is too high The proposed AT5 is too high The AT5 price path has no relief valves The proposed UUP is potentially inequitable The application of the UUP is unclear Rail operators not included in regulatory pre-approval process	11 11 13 15 16 17 17
4. 4.1 4.2 4.3 4.4 4.5 4.6	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU The proposed AT5 must be efficient The proposed AT5 is too high The AT5 price path has no relief valves The proposed UUP is potentially inequitable The application of the UUP is unclear Rail operators not included in regulatory pre-approval process Legal certainty and the AT5 DAAU	11 11 13 15 16 17 17 18
4. 4.1 4.2 4.3 4.4 4.5 4.6 4.7	COMMENTS ON SPECIFIC ELEMENTS OF THE 2013 DAAU The proposed AT5 must be efficient The proposed AT5 is too high The AT5 price path has no relief valves The proposed UUP is potentially inequitable The application of the UUP is unclear Rail operators not included in regulatory pre-approval process Legal certainty and the AT5 DAAU Need for a binding ruling	11 11 13 15 16 17 17 18 18

## Electric traction pricing in Blackwater - 2013 Draft Amending Access Undertaking

## Executive Summary

This submission sets out Aurizon's views on Aurizon Network's 2013 Draft Amending Access Undertaking (2013 DAAU) for reform of the AT5 tariff arrangements in Blackwater. Aurizon has provided three earlier submissions to the Queensland Competition Authority (QCA) on this issue, firstly in response to Aurizon Network's original proposal in the 2011 DAAU, followed by two further submissions in response to the QCA's Draft Decision to not approve that proposal.

As an independent train operator and an advocate for its customers, Aurizon supports the ongoing efforts of Aurizon Network to resolve the pricing issues associated with electric traction in Blackwater. The 2013 DAAU is an encouraging development in this lengthy process, and Aurizon Network's willingness to reduce the AT5 tariff and do defer revenue are welcome developments.

The 2013 DAAU is based on the concept of reducing AT5 with a view to encouraging the use of electric traction in Blackwater. Once utilisation of electric traction increases sufficiently to deliver the economies of scale that are required to ensure a sustainable and efficient AT5 price, Aurizon Network will recover any deferred (unrecovered) revenue resulting from the initial reduction in the AT5 price. The proposal includes fixing AT5 for eight years.

The 2013 DAAU aims to resolve the issues associated with the current average cost pricing methodology for AT5, which has provided inefficient price signals and which has not encouraged efficient utilisation of the electric traction infrastructure in Blackwater.

Aurizon believes it is essential that the Blackwater AT5 reflects only the efficient costs of providing access to the electric traction infrastructure in Blackwater, including that it should exclude the costs imposed on the system by the use of diesel traction. AT5 must also reflect the efficient use of the electric traction infrastructure, which, as for any high fixed cost asset, must assume a sufficiently high asset utilisation rate to realise the economies of scale available from electric traction. In this respect, Aurizon considers an efficient and cost reflective AT5 is more important than simply an AT5 that is benchmarked against the diesel equivalent.

Aurizon notes that there are currently multiple overlapping processes for the treatment of AT5, namely this 2013 DAAU, the transitional AT5 tariff to apply in 2013/14 under an extended UT3, and proposed UT4 pricing in the 2013 Draft Amending Undertaking (2013 DAU). This is causing uncertainty for producers and Aurizon, as an access holder, continues to work with customers to ensure that their commercial interests are understood and promoted.

The 2013 DAAU appears to be an 'in-principle' proposal that includes options that are yet to be decided. To this end Aurizon has taken the opportunity to provide its views about how the 2013 DAAU could be further developed, in order to assist with the resolution of this important issue.

#### Balancing stakeholder interests - Risk

In particular, it is important for the 2013 DAAU to explain how the proposal balances the interests of the different stakeholders, including Aurizon Network, access holders, train operators and end users. This is particularly so with respect to the pricing principles in the *Queensland Competition Authority Act 1997* (QCA Act) and the treatment of risk.

One practical implication of the proposal to fix AT5 over an eight year period is that it exposes Aurizon Network to volume risk related to under utilisation of electric traction and/or lower than forecast system volumes. The 2013 DAAU proposes to deal with these risks through an under utilisation payment (UUP) designed to insulate Aurizon Network from these risks by shifting them to users, based on their better ability to manage volumes.

The 2013 DAAU suggests the UUP could be levied on either Blackwater users or all users in the Central Queensland Coal Network (CQCN). Aurizon believes that, to the extent that a UUP is required, it should be paid by all Blackwater users regardless of traction choice. Charging the UUP to access holders that predominantly use diesel traction is justified on the basis that they should pay a portion of the costs that their choice to operate diesel traction imposes on the system. Naturally, users which do not have the opportunity to use electric traction, such as those on non-electrified spurs, should not be required to pay for the option of such a choice.

While the proposed UUP is designed to mitigate Aurizon Network's volume and electric traction utilisation risks, the 2013 DAAU must clarify the way variations to the assumed capital and operations costs will be treated. If it is envisaged that cost variations will be captured in the UUP, the 2013 DAAU must clarify the role of the QCA in assessing the prudency and efficiency of costs. Aurizon believes the UUP must not operate as a catch all to

recover costs which are not assessed as efficient or prudent. It is Aurizon Network – not users – who are responsible for the prudent and efficient operation of the network.

Aurizon Network should be responsible for its performance and should bear the associated revenue risks (as is the case with its other regulated assets) thus ensuring that it continues to have an incentive to invest prudently, to manage the costs of augmentation efficiently and to operate the network efficiently.

#### The proposed AT5 is not efficient and is too high

An essential requirement of electric traction pricing is an efficient AT5, set at a level which will promote increased utilisation of the electric assets. An efficient AT5 is one that reflects the efficient costs of providing access to the electric traction service but excludes costs associated with the traction choice of other users. The AT5 price level required to promote increased use of electric traction will also depend to some extent on the relative costs of the diesel substitute.

Aurizon believes the AT5 price proposed in the 2013 DAAU is not efficient as it includes the costs imposed on the system by the use of diesel traction. Specifically, the proposed AT5 price reflects the impact of continued diesel traction use during UT4, resulting in a less than efficient rate of utilisation of the electric infrastructure.

The AT5 price also appears to include the additional capital and operational costs associated with maintaining interoperability of diesel and electric traction. These are costs related to, for example, electrification of duplications constructed to accommodate increased traffic volumes (regardless of traction type) and the costs of power strengthening required as a result of increased traffic density on a given line section. These costs are incurred as traffic volumes increase regardless of traction choice and can therefore not be solely attributed to electric traction.

Given the view that the proposed AT5 is not efficient, it stands to reason therefore that Aurizon considers the proposed level of the AT5, being \$3.05/'000egtk, is too high. The risk of setting the AT5 price too high is that it does not sufficiently incentivise the use of electric traction and continues to expose the Blackwater electric assets to bypass by diesel traction. Under a fixed price path, if AT5 is set too high it will not result in increased electric utilisation and the size of the UUP will potentially become unmanageable.

Even with a high AT5 price one alternative option to ensure electric traction remains competitive with diesel (and avoids bypass) would be for Aurizon Network to provide a rebate to electric trains to compensate electric traction users for the costs imposed by the use of diesel traction, with the cost of the rebate potentially being recovered through the UUP.

Increased electric traction utilisation rates are essential to realising the efficiencies available from electric traction, in order to achieve an efficient and cost-reflective AT5 price that remains competitive with the diesel alternative. However, while the diesel equivalent is important in setting the level of AT5, given the superior efficiency of electric traction (at sufficient utilisation), Aurizon believes the priority is to set AT5 at the 'efficient' level that reflects the cost of providing the service as this will result in an AT5 price that is low enough to ensure a sustained increase in the use of electric traction.

#### **Review mechanism**

The 2013 DAAU proposes to fix the AT5 price over an eight year period, with indexation at the consumer price index (CPI) but it does not provide for any price review should there be a material change in circumstance. With the AT5 price set based on forecast costs, some flexibility may be required should actual costs (e.g. for electrification of the Rolleston line or the renegotiated PowerLink connection charges) vary from those forecast. A review may also be needed in the event that the relative costs of diesel and electric traction change.

#### Timing and implementation of the UUP

Another element of the proposal to fix the AT5 price is the assumption that Aurizon Network will under recover revenue during the early years of the AT5 price path and over recover in later years. If the under recovery is greater than forecast by the end of the UT4 period, a UUP payment will be required. At the end of the UT5 period, the assumption is that no revenue will remain unrecovered, but should this not be the case, another UUP payment will be required.

To the extent that an access agreement expires during UT4, prior to the UUP being levied, the access holder will avoid the unrecovered costs for which it should be liable. Conversely access holders with new agreements commencing immediately prior to the UUP payment date will incur costs for which they should not be liable. An annual UUP payment would seem more equitable, noting that no UUP should be required in the early years if the forecast costs and revenue are accurate.

The 2013 DAAU is also completely silent on the way in which the UUP would be implemented. While potential options include a one-off bullet payment from access holders at the end of UT4 and UT5, some kind of premium on AT3 or AT4, or capitalisation of the under recovery into the RAB, no options have been suggested in the proposal.

Aurizon considers the method of implementation for the UUP is material to stakeholders' ability to assess the impact of the 2013 DAAU on their business and therefore that it requires explanation.

#### Other matters

#### Regulatory pre-approval for capital expenditure

Aurizon notes that regulatory pre-approval of Aurizon Network's electric traction infrastructure investments was based on endorsement by end users, not by access holders, presumably on the assumption that commercially negotiated rail haulage agreements (many of which were already in place), provided for pass through of access charges to end users.

However the access charges are levied against access holders, most of whom are train operators, not the end users who endorsed the relevant electric assets. Aurizon believes that if forecast capital projects are to seek regulatory pre-approval, given that access holders pay the access charges, it is essential that access holders are included in any pre-endorsement process.

#### Approval and implementation of proposal

The 2013 DAAU proposes a set of principles in **Schedule K** for inclusion into the UT3. Aurizon considers that as principles, the 2013 DAAU is not in a form which allows an actual change to the AT5 price to be implemented. Consequently, should the QCA approve these principles, Aurizon seeks clarification that the actual implementation would occur as part of UT4 through amendments to Part 6 and Schedule F of the draft currently with the QCA for consideration.

Aurizon also seeks clarification about the interaction between the proposed AT5 price of \$3.05/'000egtk, the \$3.49/'000egtk approved as the transitional AT5 tariff for 2013/14 and the proposed \$2.75/'000egtk included in the 2013 DAU for UT4.

#### Requirement for a ruling

Further to this, Aurizon understands that at some point in the future, Aurizon Network will have to apply for a ruling under Part 6, Division 7A of the QCA Act to implement the proposed eight year price path and seeks confirmation about how this will be implemented.

## 1. Introduction

On 16 December 2011, Aurizon Network (then QR Network) applied to the Queensland Competition Authority (QCA) to amend its 2010 Access Undertaking (UT3) to implement new pricing arrangements for electric traction services in the Blackwater system (the 2011 DAAU). The process for the QCA's consideration of that DAAU lasted for more than a year, and resulted in Aurizon Network withdrawing the DAAU to consider alternatives in January 2013.

The economic problem that the 2011 DAAU sought to address has now been well canvassed. Simply, the current average cost pricing methodology provides inefficient price signals for the efficient utilisation of the electric traction infrastructure. When utilisation is low, average cost pricing results in a high price signal, thereby encouraging the increased use of diesel services. This, in turn, results in further increases in the price for electric traction services, rendering both above and below rail electric assets uneconomic.

Since the 2011 DAAU was lodged, Aurizon has been a committed advocate for the interests of electric traction users in the Blackwater system. Aurizon believes that there is a fundamental need for the supply-chain to coordinate traction choice in order to provide all stakeholders with the superior benefits for an electric traction system.

This is Aurizon's fourth submission to the QCA on this issue. Prior submissions are as follows:

- Aurizon (then QR National) provided a submission on the 16 April 2012. The submission was generally
  supportive while maintaining an open attitude to alternative solutions that industry, Aurizon Network and
  the QCA may seek to explore.
- On 25 September 2012, Aurizon provided substantial feedback to the QCA's Draft Decision, in particular
  arguing strongly in support of the superior efficiency of electric traction for the Blackwater system, and
  noting a number of shortcomings with the QCA's Draft Decision.
- In response to the large number of stakeholder submissions and the significant amount of new information that emerged from the response to the Draft Decision, the QCA sought further information from stakeholders on 8 October 2012. Aurizon responded to the request with a submission on 23 November 2012.

On 22 January 2013, Aurizon Network withdrew the December 2011 DAAU, stating that it intended to consult with stakeholders to develop an alternative DAAU. The QCA followed with a Discussion Paper to support a QCA led stakeholder workshop on the issue, which was held on 23 January 2013.

On 24 April 2013, Aurizon Network submitted a revised AT5 DAAU to the QCA for approval (the 2013 DAAU). Aurizon understands that Aurizon Network has negotiated many aspects of the 2013 DAAU directly with the QCA. Aurizon notes that the proposed **Schedule K** amendment to UT3 has been included in Aurizon Network's 2013 Draft Access Undertaking (UT4).

This submission is response to the QCA's invitation to stakeholders to respond to the 2013 DAAU by 10 June 2013.

## 2. The 2013 DAAU

## 2.1 Overview of the 2013 DAAU

As Aurizon Network's second proposal for the reform of the AT5 tariff arrangements in Blackwater, the 2013 DAAU has three main components:

- First, a reduction in the AT5 price to a level that is intended to be low enough to encourage the take-up of electric traction services. The rationale for the tariff reduction is that it will encourage the increased utilisation of the electric infrastructure, and that this in turn will allow Aurizon Network to recover its prudent and efficient costs. This is implemented by replacing the current average-cost AT5 charge with a fixed AT5 price path over eight years;
- Second, the revenue that Aurizon Network foregoes as a consequence of reducing the AT5 tariff is to be deferred and recovered at a later time. In other words, rather than recovering electric traction costs annually through AT5 revenue, Aurizon Network will defer revenue in early years of the eight year price path and aim to recover that revenue in later years based on an assumption of increasing utilisation of the electric assets;

• Third, to the extent that AT5 revenue does not recover Aurizon Network's full revenue allowance for the eight year period (likely due to electric volumes being less than predicted over the eight years), a levy will be paid at the end of UT4 and/or UT5 to recoup the difference between approved costs and the revenue recovered through the AT5 charge. This levy is referred to by Aurizon Network as an Under Utilisation Payment (UUP). Aurizon Network has provided the option in the 2013 DAAU for that UUP to be paid by either Blackwater access holders or all CQCN access holders (including those in non-electrified systems). The levy will be traction mode neutral, being paid by all users regardless of whether they predominantly run diesel or electric services.

Importantly, Aurizon Network has made it clear that it expects the lower AT5 will be insufficient to recover Aurizon Network's prudent and efficient costs of providing the electric traction service in Blackwater in the early part of the eight year price path. This results in Aurizon Network experiencing a revenue shortfall over UT4, which the 2013 DAAU proposes will be recovered over the subsequent regulatory period (UT5).

### 2.2 Interaction of the 2013 DAAU with other regulatory processes

Aurizon considers the current, multiple processes around the treatment of AT5 to be potentially confusing and seeks clarification around the relationship between each of the three proposals around AT5. Aurizon understands that:

- The AT5 Blackwater tariff for 2013/14 has been voluntarily reduced to \$3.49 by Aurizon Network in its UT3 Extension DAAU (May 2013), with revenue deferred in good faith and eventually recovered from access holders. Aurizon understands that Aurizon Network consulted on this arrangement with the Queensland Resources Council;
- The 2013 DAAU provides a set of principles in the proposed **Schedule K**, which will be incorporated into UT3. As principles, it is not envisaged that the 2013 DAAU will provide:
  - o for any actual change of the AT5 tariff; or,
  - sufficient detail in the text of UT3 for the actual implementation of the concepts set out by Aurizon Network in its explanatory submission.

Despite this, an indicative tariff of \$3.05 is mooted in the 2013 DAAU, based on some UT3 assumptions (WACC) and some UT4 assumptions (other costs and volumes).

- Aurizon Network's proposed UT4 provides for an indicative Blackwater AT5 of \$2.75/'000egtk for 2013/14, based on the methodology in the 2013 DAAU and the UT4 cost and revenue assumptions. Its actual implementation into the text of the draft UT4 has not occurred, however, Aurizon Network will need to (at some stage in the future) provide for amendments to Schedule F and Part 6 of UT4; and
- Aurizon understands that (at some stage in the future) Aurizon Network will have to apply for a ruling under Part 6, Division 7A of the QCA Act to implement the proposed eight-year price path.

To the extent that the management of multiple, overlapping regulatory proposals has resulted in uncertainty for producers, Aurizon, in its capacity as access holder, continues to actively work with customers, to ensure that their commercial interests are understood and promoted.

## 2.3 Aurizon's approach in responding to the 2013 DAAU

Aurizon supports the efforts of Aurizon Network to resolve the issues associated with pricing electric traction in Blackwater. These arrangements must be workable and practical to implement, and must provide sufficient certainty and incentives to support the ongoing efficiency and competitiveness of the coal supply chain. Past investment decisions have been made and capital costs incurred by stakeholders over a period of evolving demand and supply and changing market conditions. Pricing arrangements for electric traction in Blackwater need to be sufficiently flexible to support ongoing investment, innovation and competition given the likelihood of continued variability in market conditions.

To that end, the 2013 DAAU is an important step in the continued, lengthy process to resolve this issue. Aurizon's response is guided by a number of high-level considerations:

Aurizon, together with industry participants and the QCA, was briefed on earlier versions of the 2013 DAAU prior to its submission.<sup>1</sup> The 2013 DAAU as proposed differs from those earlier briefings, in part, Aurizon understands, due to feedback from the QCA and others. Some of those changes are of concern, particularly, those resulting in a higher (and inefficient) AT5. More broadly, Aurizon is only able to respond

<sup>&</sup>lt;sup>1</sup> Although not mentioned as a participant in industry briefings in Appendix A of the 2013 DAAU, Aurizon Holdings has also been briefed by Aurizon Network.

to the public materials lodged by Aurizon Network, and is not able to track and respond to policy changes prior to the lodgement of the formal documents.

As an independent above rail business and an advocate for its customers, there are a number of aspects
of the 2013 DAAU on which Aurizon requires clarification before being able to support its incorporation into
the access undertaking. The provision of a draft (rather than final) Schedule K, together with the provision
of options for consultation in its submission, would suggest that Aurizon Network expects to withdraw and
modify the 2013 DAAU based on stakeholder feedback.

Nonetheless, Aurizon considers that the 2013 DAAU is an encouraging development and the willingness of Aurizon Network to defer revenue, together with its recognition of the need to reduce AT5 to encourage utilisation are welcome developments for electric traction users in Blackwater.

As the 2013 DAAU is presented as an 'in principle' only submission, Aurizon assumes Aurizon Network is open to feedback on the proposal and has taken the opportunity to identify areas where the 2013 DAAU requires further definition and clarification.

## 2.4 Structure of Aurizon's submission

As an independent above rail business and an advocate for its customers, Aurizon seeks clarification and further information about a number of aspects of the 2013 DAAU, before being able to support its incorporation into the access undertaking.

This submission is structured as follows:

Section 3 below discusses the need for the 2013 DAAU to explain how the proposal meets the requirements of the *Queensland Competition Authority Act 1997* (QCA Act) both in balancing the interests of different stakeholders and more specifically, related to the pricing principles and the allocation of costs and risk. Aurizon is concerned that the proposed AT5 is not efficiently determined (and is too high as a result), and considers that an examination of the pricing principles would be of use to stakeholders, as it would more transparently demonstrate why the proposed AT5 (and revenue recovery arrangements) are economically efficient. Section 3.1 evaluates the proposed options for dealing with volume and utilisation risk, while section 3.2 discusses the treatment of other risks, including those related to prudent investment and efficient operation.

Section 4 comments on specific elements of the 2013 DAAU, identifying issues which require further consideration prior to any final decision on whether or not to approve the proposal. For example, section 4.1 discusses the essential requirement for an efficient and sustainable AT5 price. The costs imposed by the continued use of diesel traction on the electrified line sections appear to be included in the proposed AT5 price, thus continuing to penalise electric traction users (who constitute the vast majority of Blackwater users).

Section 4.2 deals with the efficient level of AT5 which must be set to encourage the use of electric traction and reduce the exposure of the Blackwater electric traction assets to bypass by diesel traction. Increased usage of electric traction is essential to realising the efficiencies available from electric traction upon which the sustainability of an efficient and cost-reflective AT5 price depends. The section discusses options for maintaining a sufficiently low AT5, while still providing for Aurizon Network to recover its efficient costs.

Further to this, the proposed AT5 pricing arrangements do not provide for any 'relief valve' in the event that significant variations in the assumed cost inputs occur over the period of the price path. The options around some kind of review provision are explored in section 4.3, with consideration of appropriate provisions to ensure Aurizon Network is incentivised to minimise costs (e.g. negotiated Powerlink connection costs) and improve efficiency. As currently proposed, the 2013 DAAU appears to allocate all cost risk to those access holders liable to pay the UUP.

Aurizon notes that the proposed four yearly UUP payments, to the extent that they are explained in the 2013 DAAU, risk inequity between access holders depending on when their access agreements expire or commence. Section 4.4 discusses the risk that access holders with agreements commencing immediately prior to the end of the UT4 period when a UUP payment (if required) may be due, may be liable for payments for unrecovered revenue related to periods prior to their commencement. The reverse is also possible, where holders of expired access agreements avoid UUP payments.

Section 4.5 notes that the implementation of the UUP is unclear and that 2013 DAAU does not include sufficient detail to allow access holders to assess the impact on their businesses. Aurizon notes that rail operators were excluded from the regulatory pre-approval process despite that all access holders at that time were rail operators. The pre-approval process has been based on the assumption that coal producers underwrite investments in the coal transportation infrastructure, although in fact, rail operators, as access holders, are responsible for access charges (and presumably the UUP) and are only able to pass those costs to producers when permitted under the relevant haulage agreement. Uncertainty around below rail pricing increases the risks to above rail operators,

limiting incentives for flexible haulage contracting. As noted in section 4.6, Aurizon considers that the 2013 DAAU should show how the interests of rail operators, as access holders, have been considered.

Section 4.7 examines process around the proposed amendments to UT3 as a result of the 2013 DAAU. Approval of the 2013 DAAU by the QCA would see the UT3 amended to include the proposed **Schedule K** which has been presented in draft form and contains only "in principle" guidelines that are insufficient to guide the actual implementation of an AT5 price.

Aurizon notes in section 4.8 that the 2013 DAAU is silent on how certainty will be provided given the proposed regulatory arrangements are designed to apply over two regulatory periods.

And finally, section 4.9 highlights the need for clarity about how the various published AT5 price levels interact with each other, including for example, how the transitional AT5 tariff for 2013/14 (proposed at \$3.49/'000 egtk) will be dealt with if the 2013 DAAU is approved. The submission is concluded at section 5 with a brief summary of Aurizon's views.

The remainder of this paper deals with these issues in order.

## 3. Requirements of the QCA Act

The QCA may approve a DAAU only if it considers it appropriate to do so after considering the items set out in section 138(2) of the QCA Act. That is, the 2013 DAAU must be assessed against a range of matters aimed at balancing the interests of the access provider, access seekers/holders and the public, including the public interest in having competition in markets. This includes a requirement that the 2013 DAAU must satisfy the object of Part 5 of the QCA Act, which relates to promoting the economic efficiency of the regulated service, and promoting a material increase in competition in related markets.

Of particular relevance, the assessment criteria in the QCA Act also include specific reference to the pricing principles, which naturally affect the interests of stakeholders especially around the issues of efficiency, cost recovery and risk. In particular, the treatment and allocation of risk between Aurizon Network, access holders and end users, including how the risks are allocated over time are important elements of any proposal around electric traction pricing.

The 2013 DAAU does not indicate how these issues will be managed, making it more difficult to determine the basis upon which Aurizon Network considers its pricing proposal is efficient and whether it meets the requirements of the QCA Act. It is important for stakeholders to be able to determine the efficiency properties of AT5, and thus, whether the 2013 DAAU will solve the problem it seeks to address – namely, encouraging the use of electric traction services by re-pricing Blackwater electric access at an efficient level.

### 3.1 Volume and utilisation risk

The 2013 DAAU aims to propose an efficient, cost-reflective price based on expected utilisation of the electric traction infrastructure. On the basis of Figure 1 in the 2013 DAAU, the expected utilisation appears to be based on:

- for the period of UT4 (2013/14 to 2016/17) the forecast electric gross tonne kilometres (egtks) based on current operator traction choices. This is the under-recovery period: and
- for the period of UT5 (2017/18 to 2020/21) the forecast egtks from services which can feasibly utilise the overhead power system. The forecast volume levels for this period assume an average throughput of 85% of contract and that operators will switch to electric traction by UT5 in response to the price signal. This is the over-recovery period.

To the extent that utilisation is lower than these levels the pricing principles provide that Aurizon Network is still entitled to generate expected revenue that is at least enough to meet its efficient costs of providing access to the electric traction service, including a return on its investment commensurate with the regulatory and commercial risks involved.

The level of Aurizon Network's return on capital and its adequacy or otherwise is beyond the scope of this particular submission. However, in terms of the risks incorporated into that return, Aurizon Network's regulated service is subject to a revenue cap form of regulation, which provides revenue certainty for prudent and efficient investment in (and operation of) the service including a regulated return on investment.<sup>2</sup> In effect, this insulates

<sup>&</sup>lt;sup>2</sup> Aurizon understands that the regulated return reflects the risks Aurizon Network faces.

Aurizon Network from volume risk associated with fluctuating system demand and is designed to encourage investment in the network.<sup>3</sup> .

The practical implications of the proposal for a price cap for AT5 is that it exposes Aurizon Network to volume risk related to under utilisation of electric traction and/or lower than forecast system volumes. The 2013 DAAU proposes to deal with these risks through the UUP charge, which is consistent with Aurizon Network's revenue cap form of regulation and which insulates it from risks around system volumes and under utilisation of the electric traction infrastructure.

The proposed price path in the 2013 DAAU will result in an under recovery during the initial (UT4) regulatory period, with catch up revenue recovered during the second (UT5) regulatory period. At the approved AT5 tariff, deferred revenue at the end of UT4 will not be recovered unless the under-recovery is more than originally forecast in setting the price path.

Should the QCA agree that the UUP should be payable, the 2013 DAAU proposes three options which are set out in the sub-headings below. As noted, the incorporation of options in the 2013 DAAU suggests the 2013 DAAU will be amended once an option is agreed.

#### 3.1.1 Option 1 - the UUP is levied on all Blackwater users:

The UUP is levied on users of the Blackwater system whether or not they use the electric infrastructure. That is, access holders would pay a UUP charge regardless of the mix of traction services they operate. Given that if electric utilisation is sufficiently high there will be no UUP, this arrangement may provide an incentive for Blackwater users to select electric traction, which in turn delivers the efficiency benefits that electric traction provides when utilisation rates are high. The level of the AT5 price and the potential impact of the UUP on an individual user will determine the strength of this incentive.

The justification for charging access holders that operate diesel services the UUP is that they should pay a portion of the costs that their choice to operate diesel traction imposes on the system. Under this option, electric traction users will also pay a portion of the costs that diesel users impose on the system, despite that they themselves have selected to use electric traction. However, in the context of the UUP, this ensures all users in the Blackwater system share in the under utilisation risks associated with electric traction infrastructure.

It should be noted that the costs associated with the use of diesel traction in Blackwater extend beyond the impact of reduced electric traction asset utilisation. That is, to the extent that diesel trains add to the traffic on the system, there are additional costs associated with strengthening the overhead power system (increasing capacity) to avoid operational and scheduling conflicts arising from increased traffic density within a given electrified line section. The use of diesel traction in an electrified system therefore imposes costs by virtue of their operation in that system.

Nonetheless, users which do not have the opportunity to use electric traction, such as those on non-electrified spurs, obviously have no control over the costs of their traction choice on the system and should not be required to pay for the option of such a choice. Aurizon seeks clarification that users located on spurs that are never likely to be electrified, such as Minerva, will not be subject to any UUP.

#### 3.1.2 Option 2 - the UUP is levied on users of the Central Queensland Coal Network (CQCN)

The 2013 DAAU submission indicates that the rationale for this option is that all CQCN users benefit from lower access charges as a result of a lower regulated rate of return (WACC) to Aurizon Network, than if it were exposed to asset stranding risk for customer-approved investments. Consequently, all users should be liable for any UUP charges that are required to manage Aurizon Network's asset stranding risk for Blackwater electric infrastructure.

While this option would provide for the lower per net tonne charge given the higher volumes over which the UUP would be levied, the disadvantage is that users would face prices that did not reflect the costs of providing the service to them. For example, users in other rail corridors would be faced with charges related to costs incurred in Blackwater. A further consideration is that the costs would be born by customers outside of the Blackwater system customer group from which customer endorsement was sought and who therefore had no role in the decision as to whether or not the investment was made.

### 3.1.3 Option 3 - the UUP is levied on all Blackwater users for UT4 and on CQCN users for UT5

The rationale for this option is that the risks are born first during UT4 by Blackwater users, providing an incentive to increase electric traction utilisation. In the event that a UUP is required over UT5, all CQCN users, which benefit

2013 DAAU / Aurizon / Submission to the Queensland Competition Authority - 10 June 2013

<sup>&</sup>lt;sup>3</sup> This point is made by the ACCC (2013) April, Draft Decision about the 2012 NBN co Special Access Undertaking, p 132. That is, certainty over Aurizon Network's ability to recover its prudent and efficient costs (and no more) will encourage efficient investment and operation of the service. It stands to reason that any ability for Aurizon Network to over recover on its cost of investment and operation would incentivise inefficient over investment and expenditure, while conversely, an inability to recover efficient costs would discourage investment and could result in under expenditure in providing the service (reducing service levels).

from the lower WACC as a result of Aurizon Network not being compensated for exposure to asset stranding risk (as discussed above) would be required to share in the costs.

#### Aurizon's assessment

Option 1 has the benefit of incentivising (to some degree) the use of electric traction, as well as allocating the costs to the users which (most directly) impose them on the network. Options 2 and 3 eliminate or dilute this incentive respectively. Given a major objective of the 2013 DAAU is to increase electric utilisation rates to at least the level where the efficiency benefits of electric traction are enjoyed by users, the first option would seem the best of the options proposed, assuming that Aurizon Network obtains approval to levy a UUP at all.

### 3.2 Treatment of other risks

While Aurizon Network's volume and electric traction utilisation risks are mitigated through the proposed UUP, no explanation is provided about how variations to the assumed capital and operation costs over the pricing path will be dealt with. Aurizon notes from the proposed **Schedule K** that the future capital and operating costs have been built into the level of the AT5.

With a fixed AT5, it follows that the level of the UUP will increase if Aurizon Network's approved costs increase, as the AT5 will not be able to rise. This appears to be a drawback of the proposed mechanism in the 2013 DAAU. Aurizon appreciates that the UUP is designed to shift the risks associated with volumes and electric utilisation from Aurizon Network to users, who are better placed to manage these risks. For example, in the absence of strategic commercial incentives to the contrary, users will be incentivised to maximise the use of electric traction. However, Aurizon Network – not users – is responsible for the prudent and efficient operation of the network, and the UUP must be structured to ensure that this risk is not reallocated.

Consequently, Aurizon Network should bear the risks associated with its costs and performance and should not be immunised by way of the UUP. In other words, Aurizon Network must face the same regulatory risk for the electric traction assets that it faces for other assets in the CQCN in that its cost recovery depends on an assessment that its costs are prudent and efficient.

However the 2013 DAAU is silent about the way in which costs will be assessed and does not discuss the link between costs approved by the QCA and variations in the size of the UUP.

To the extent that the amounts in the UUP depend on QCA approval of Aurizon Network's costs, Aurizon Network has an incentive to invest prudently, to manage the costs of augmentation efficiently and to operate the network efficiently. In any case, QCA oversight should ensure that the size of the UUP remains publicly known and managed. However, should the QCA not approve Aurizon Network's actual costs as prudent, or if the actual costs are lower than forecast, it is essential that the UUP reflect that reduction in Aurizon Network's revenue allowance. Aurizon Network must bear responsibility for the risks over which it has control, including those related to its efficiency and operational performance. Equally, access holders should know what the impact of such a change would be on the price path (if any).

## 4. Comments on specific elements of the 2013 DAAU

In addition to the more general comments above, Aurizon has identified a number of specific elements of the proposal for comment, as set out in the following sections.

## 4.1 The proposed AT5 must be efficient

An essential requirement of electric traction pricing is an efficient AT5, set at a level which will promote increased utilisation of the electric assets. In this regard, Aurizon believes there is minimal information given in **Schedule K** and in the accompanying explanatory material on how the AT5 charge has been devised, and then tested against whether it will be competitive with diesel services. As the efficiency or otherwise of AT5 is the turn-key that makes the proposal workable, Aurizon considers that considerably more transparency should be given as to how AT5 has been devised, tested, and its efficiency properties ensured.

The efficient price is the price that would be required to recover the efficient costs at full utilisation of the electric infrastructure assets.<sup>4</sup> Full utilisation of electric infrastructure assets can reasonably be assumed to be the maximum feasible volume of gtks forecast to be shipped from all mines that are on electrified lines over the eight year period.<sup>5</sup> Aurizon notes that:

<sup>&</sup>lt;sup>4</sup> It is self evident that maximising asset utilisation achieves optimal efficiency

<sup>&</sup>lt;sup>5</sup> This is as described in the Sapere Report, p. 4. Another way of describing this would be as the total expected demand for train services from mines on electrified lines over the eight year period.

<sup>2013</sup> DAAU / Aurizon / Submission to the Queensland Competition Authority - 10 June 2013

- The Sapere Report states that the proposed AT5 is efficient as it is both cost reflective and assumes a high electric asset utilisation (i.e. 85% of maximum feasible<sup>6</sup> where 85% is the percentage of system capacity egtks required for the Blackwater electric infrastructure to be sustainable).<sup>7</sup>
- An alternative approach would be to assume full utilisation of the electric infrastructure assets to be 85% of contract volumes from mines on electrified lines over the eight year period (that is 85% of the egtks that the system could deliver at the assets' technically full utilisation level).<sup>8</sup>

As noted, the 2013 DAAU has applied neither of these approaches stating instead that the proposed AT5 charge of \$3.05/'000egtks is based on:

- egtks currently forecast for UT4 (2013/14 to 2016/17); and
- 85% of total gtks run over fully electrified paths for UT5 (2017/18 to 2020/21).9

While the forecast volumes for UT5 match those required to ensure the AT5 price is efficient (maximum feasible electric traction utilisation), those for the UT4 period assume a continuation of the use of diesel traction. This results in an AT5 that is significantly higher than if an approach that reflected the efficient utilisation of the electric assets was adopted.

The impact of the approach taken is demonstrated in **Figure 1** on page 6 of the 2013 DAAU submission (reproduced below) which shows that the forecasts for the UT4 period assume a continuation of the current use of diesel traction by operators for hauls that could otherwise use electric traction. That is, the AT5 price is not based on maximum electric traction utilisation for the entire eight year price path period, because some electric traction capacity is consumed by diesel trains.

In the figure below, the orange line (85% of capacity eGTK) shows maximum feasible egtks, while the yellow line (Forecast eGTK) shows a lower than maximum feasible forecast egtks. It is the lower yellow line that has been assumed in determining the proposed AT5 price. As the AT5 price has been set based on less than maximum feasible volumes, the resulting lower electric traction utilisation rate for the UT4 period results in a higher AT5 over the entire eight years than would otherwise be the case at optimal (efficient) electric asset utilisation.

This is not an efficient price, as it includes the costs imposed on the system by diesel users (i.e. a lower electric utilisation rate) in the AT5 price. The effect of this is to transfer the cost imposed by diesel traction users onto the electric traction users. It is essential that the AT5 price be set at a level which reflects the cost of an individual train service using the relevant infrastructure and which does not include the cost of another user's decision not to utilise those facilities.

Figure 1 from the AT5 DAAU submission - Base case using UT4 forecast system volumes



Aurizon notes that the forecasts for the UT5 period match the maximum feasible egtks which suggests that the 2013 DAAU assumes all operators are using electric traction where possible by 2017/18. This assumption would be reasonable if train operators had faced the efficient cost-reflective price for the use of the service during UT4. However, under the method currently proposed, they face a higher than efficient AT5 price, which raises the possibility that utilisation will not be at levels assumed by Aurizon Network by 2017/18. This increases the likelihood of a UUP payment at the end of UT5.

<sup>&</sup>lt;sup>6</sup> Sapere Report (2013) April 19, p. 8

<sup>&</sup>lt;sup>7</sup> Sapere Report, p. 11

<sup>&</sup>lt;sup>8</sup> In this instance full utilisation is that level of asset utilisation that an efficient access provider would require, allowing for contracted volumes, the need for surge capacity, possessions and other normal elements of an efficient network.

<sup>&</sup>lt;sup>9</sup> AT5 DAAU, p.5

To reiterate, an efficient price reflects the efficient costs directly associated with the individual train service. Where an individual train service faces a price that reflects the decisions of other users of the service, this effectively involves an allocation of common costs. It is conceptually incorrect to include costs associated with decisions of some users to operate diesel traction in the electrified system in the electric traction price.

Having noted the inefficiency in the actual calculation of an AT5 of \$3.05/'000egtk in the 2013 DAAU, Aurizon acknowledges that **Schedule K** states that the AT5 price is based on maximum feasible egtk (being 85% of the gtks for all contracted trains services for which electric traction is available). Clarification is required over the precise method of determining AT5 to ensure that the method proposed in **Schedule K** is accurately applied.

As currently drafted, Schedule K and the explanatory notes do not appear to be consistent.

#### **Recommendation:**

The proposed AT5 price should be more accurately determined to exclude the effect of diesel traction on the maximum feasible electric utilisation rate. The 2013 DAAU should ensure that the method proposed in **Schedule K** is accurately applied in determining the AT5 price level or at least that it is accurately reflected in the final approved drafting of the 2013 Access Undertaking.

## 4.2 The proposed AT5 is too high

The proposed \$3.05/'000egtk is too high, both because it has been based on UT3 assumptions (particularly related to the WACC) and because it uses UT4 forecasts for the first part of the eight year price path, rather than maximum feasible egtks. Having said this, Aurizon notes the proposed 2013/14 AT5 for Blackwater in the UT4 DAU is \$2.75/'000egtk, significantly lower than the \$3.05/'000egtk proposed in the 2013 DAAU, presumably based on revised cost input assumptions (predominantly a lower WACC).

The risk of setting the AT5 price too high is that it does not sufficiently incentivise the use of electric traction and continues to expose the Blackwater electric assets to bypass by diesel traction. The consequential impact of diesel bypass in terms of asset stranding in below-rail has been previously identified. The efficiency impacts of diesel use have been discussed in Aurizon's earlier submissions on Blackwater electric pricing.<sup>10</sup>

The problem of setting AT5 too high is of particular concern when a fixed price path is contemplated because if AT5 is set too high in the first year, it will remain too high for the subsequent eight years. If the high AT5 results in electric utilisation that is less than Aurizon Network forecasts when the price path is set, the size of the UUP will become unmanageable.

Aurizon considers that increased electric traction utilisation rates are essential to realising the efficiencies available from electric traction, which include an efficient and cost-reflective AT5 price that remains competitive with the diesel alternative. The level at which the AT5 must be set to achieve this outcome over the price path period depends on an appropriate allocation of costs over the period.

In this respect, Aurizon Network has proposed to lower the AT5 price in the early part of the price path period by deferring cost recovery to later periods, but that strategy will only result in an efficient and sustainable end point AT5 price, if the starting price encourages the required behaviour from users. The QCA has canvassed this in its 2013 discussion paper on access pricing stating its proposed solution would be to enable,

"...[T]he access prices relating to the electric infrastructure to be reduced in the early part of the life of the assets, with the plan to attract more demand for electric traction because of lower electric access prices. This strategy is aimed at allowing Aurizon Network more access pricing flexibility, potentially allowing it to capture sufficient economies of scale which would contribute toward Aurizon Network earning a fair return on its electric infrastructure investments. The idea is that Aurizon Network could reduce its access prices to electric infrastructure, so as to attract users and any losses incurred in the early years by Aurizon Network would potentially be compensated by profits that would accrue in later years as the costs were spread across higher volumes" <sup>11</sup>

The level at which electric traction will be encouraged depends on the level at which operators are prepared to select electric traction over diesel. That is, the diesel equivalent price is material to the level at which AT5 can be set. It is also the case that the less certain the behaviour of train operators in response to a lower AT5 price, the lower AT5 that will be needed to incentivise the desired response. In this respect, Hiebert (1997) demonstrated that economic welfare is maximised by lowering the price when uncertainty exists over user responses in the face of competition from substitute services and potential by-pass of the service.<sup>12</sup> The implication is that the greater the

<sup>&</sup>lt;sup>10</sup> Aurizon (2012) September, 25, Submission on QR Network's Electric Traction Draft Amending Access Undertaking (DAAU), s. 4

<sup>&</sup>lt;sup>11</sup> QCA (2013) Discussion Paper on Capacity Expansion and Access Pricing for Rail and Ports, p 27

<sup>&</sup>lt;sup>12</sup> Hiebert, D. L. (1997) Efficient Intertemporal Utility Pricing under Uncertainty, Managerial and Decision Economics, Vol 18, pp. 329 – 334.

uncertainty about the use of electric traction over diesel, the lower the AT5 price must be in relation to the diesel equivalent.

However, while the diesel equivalent is important in the setting the level of AT5, as noted above, it is also necessary that AT5 be set at an 'efficient' level that reflects the cost of providing the service. Given the inherent efficiency of electric traction (at sufficient utilisation), setting AT5 at a level which reflects efficient utilisation of the electric traction assets will achieve an AT5 that is low enough to ensure a sustained increase in the use of electric traction.

#### **Recommendation:**

The proposed AT5 price should be set at a level that reflects the efficient cost of providing access to the electric traction service, where utilisation of the electric traction is assumed to be at maximum feasible (efficient) levels. Aurizon believes this price is lower than both the diesel equivalent and the proposed \$3.05/'000egtk, which has been based on inaccurate input assumptions. The level of AT5 should be more accurately determined to ensure the efficiency benefits of electric traction are realised in Blackwater.

#### 4.2.1 Costs of Diesel Services

Aside from the cost impacts of lower utilisation rates of the electric infrastructure where diesel trains operate in an electrified system such as Blackwater, there are other negative externalities imposed by the use of diesel traction system. Operating diesel trains in an electrified system introduces operational and capital inefficiencies that result in much higher overall costs to the system to meet the total demand for capacity.

Firstly, there are costs associated with maintaining interoperability of diesel and electric traction. For example, where the total traffic volumes increase (whether using diesel or electric trains) the network will require expansion. The expansion (e.g. a duplication) will require electrification, not only to maintain the scheduling flexibility needed to operate the increased traffic volumes, but also to maintain the standard of service offered to electric traction users. To leave one of a pair of duplicated lines un-electrified would constrain the additional capacity and flexibility created by the duplication because electric trains could not use the duplication. Only part of the total fleet would have the flexibility to use either of the duplicated lines.

Secondly, in addition to the cost of electrifying expansions, it will be necessary to strengthen the overhead power system in the existing electrified sections to avoid operational and scheduling conflicts associated with increased traffic density. That is, without power strengthening, electric capacity will be limited to the number of trains that can be supplied with power over a particular electrified line section, effectively constraining capacity in that section.

In short, to not expand and strengthen the electric power system to accommodate additional diesel traction services would be to deny the electric access holder the ability to operate a comparable service. This could materially affect their ability to compete in the downstream market and would be contrary to both the object of the QCA Act and the requirements of section 100(2).<sup>13</sup>

These costs are highlighted because they are imposed on the electric traction asset base regardless of traction type and are therefore not attributable solely to users of the electric traction.

While operating a mix of technologies (diesel and electric traction) is intuitively less efficient than a single systemwide technology, to the extent that multiple technologies are demanded by users, it is imperative that the costs are accurately allocated. A technical assessment of the costs that should be allocated to electric services and those that should be allocated specifically to diesel services or shared by all users may require significant work by qualified experts. Both the costs of expanding the electrified system as a result of non-electric traction users and the costs of electric power system strengthening associated with interoperability would need to be identified.

#### **Recommendation:**

Aurizon considers that in determining an efficient AT5 price, it is important to assess the costs to the electric traction infrastructure that are attributable to the use of diesel traction. It is not efficient to include costs associated with diesel traction, or indeed common costs in the AT5.

#### 4.2.2 Rebate option

Where the AT5 price includes the costs associated the use of diesel traction in the electrified system (such as the costs associated with underutilisation, and the capital and operational costs imposed by the use of diesel traction in the electrified system as discussed above) then an alternative option to ensure electric traction remains competitive with diesel (and avoids bypass) would be for Aurizon Network to provide a rebate to electric trains. The rebate would compensate electric traction users for the costs included in AT5 that reflected the costs imposed by diesel

2013 DAAU / Aurizon / Submission to the Queensland Competition Authority - 10 June 2013

<sup>&</sup>lt;sup>13</sup> This point was made by Aurizon Network in its September 2012 submission in response the QCA's Draft Decision, s 3.7.2.2, p 49

use.<sup>14</sup> To the extent that the rebate reduced Aurizon Network's revenue from access charges, the UUP could increase.

Such an increase would reflect a cost to Aurizon Network, but would not be an electric traction cost. Rather, it would reflect the cost that diesel traction had imposed on electric trains through lower electric traction utilisation rates. One advantage of this option is that it could maintain the current AT5 average cost methodology, which is appropriate when electric utilisation rates are sufficiently high such as is the case in the Goonyella system. At the same time this approach would also provide cost reflective price signals to users about traction options.

That is, the average-cost based AT5 would be charged to electric trains, which would then receive a rebate equal to the difference between the average-cost based AT5 and the 'efficient' AT5. The 'efficient' AT5 would be the price charged if the forecast gtks (which are able to use the electric traction service) were railed. Electric traction users would face cost reflective charges (AT5 – rebate) thus ensuring there would be no disincentive to use electric traction. The rebate revenue paid by Aurizon Network to electric trains would be recovered through the pricing of common costs, similar to the UUP payment.

An advantage of the rebate arrangement is that it would not require a price path to be set, nor an accumulation of under recovered revenue to be managed over the period such as is the case with UUP. Rather, the current AT5 pricing methodology would be retained and a rebate would be paid only until the average-cost based AT5 matched the 'efficient' AT5 price. That is, once utilisation rates were at maximum feasible, the rebate would wither away.

#### **Recommendation:**

Consideration should be given to a rebate arrangement as an alternative to setting an efficient AT5 price that reflects only the efficient costs of providing the electric traction service to an individual train service. A rebate paid to electric trains to ensure they faced the 'efficient' costs of using electric traction would encourage electric traction take up. Once the electric utilisation rates increased to the 'efficient' level, the average-cost based AT5 would be equal to the efficient AT5 price and the rebate would reduce to zero.

## 4.3 The AT5 price path has no relief valves

The AT5 DAAU proposes that a fixed AT5 price path be set over an eight year period, indexed at the consumer price index (CPI). No provision has been made in the event that circumstances change, such as if costs vary from those assumed in setting the initial price, (e.g. for electrification of the Rolleston line) or if the relative cost of diesel and electric traction change. For example, should the price of diesel fall significantly, the proposed AT5 price path may still not address the bypass risk, may promote inefficient utilisation of the electric infrastructure and could result in an unmanageably large UUP.

Conversely, if volumes were to increase significantly, rather than reducing the AT5 price, Aurizon Network may potentially over recover revenue for an unnecessarily long period, resulting in a large UUP refund. There is also a risk that UUP payments may significantly blow out, potentially representing a price shock for access holders.

Some kind of relief valve, such as a price review mechanism would seem essential. While on the one hand revenue certainty is necessary to ensure efficient operation of, and investment in, the service, on the other, efficient use depends on cost-reflective pricing. To the extent that costs differ from those forecast, or change over time, it is essential that the AT5 price is amended to reflect the changes. Consequently, a review mechanism which also provides a level of certainty should be included.

#### 4.3.1 Changes in costs

As a specific example, should the capital expenditure forecasts increase above those forecast to be incurred over the eight year price path period, a review should be allowed to reset AT5 to a level that maintained the relative balance between revenue recovery and costs. While the fixed price path aims to provide stability to the AT5 price, it is also necessary to ensure that Aurizon Network recovers its efficient costs (and no more) in order to provide adequate incentives for efficient investment in the network.<sup>15</sup>

#### 4.3.2 Powerlink charges

Some changes in cost are at least partially within Aurizon Network's control, for example, the renegotiation of terms and conditions with Powerlink where existing connections cease to be prescribed transmission services. As the most significant input cost risk (with operating costs representing up to 40% of the revenue requirement) it is essential that the Aurizon Network has strong financial incentives to negotiate prudent and efficient prices with Powerlink.

<sup>&</sup>lt;sup>14</sup> Note that s.138(2)(e) of the QCA Act provides for compensation if the rights of users of the service are adversely affected.

<sup>&</sup>lt;sup>15</sup> See footnote 2

One option for such an incentive could be to fix a proportion of the forecast costs for Powerlink connection charges. Where Aurizon Network renegotiates connection charges that are lower than currently being paid, the benefits could be shared with users through an adjustment to the UUP.

Where higher fees are negotiated, Aurizon Network's ability to pass through the increased costs should be subject to independent third party assessment of the prudency and efficiency of the negotiated transmission services.

#### 4.3.3 QCA role in assessing costs:

A further area of uncertainty around changes to costs, relates to the role of the QCA in assessing the prudency of costs. While the UUP is designed to protect Aurizon Network from system volume risk and the risk that electric traction assets are under utilised, the 2013 DAAU does not explain how the costs assumed in determining the AT5 price level will be treated by the QCA over the price path period.

It is appropriate that the QCA's role in assessing the prudency of capital expenditure and operating cost forecasts for the regulated service is also applied to the forecasts used in developing the AT5 price path. For example, the current regulatory arrangements require Aurizon Network to submit annual capital expenditure to the QCA for assessment against the prudency of scope, standard and cost and Aurizon Network is required to justify the efficiency of operating and maintenance costs. Similarly, the QCA assesses the efficiency of operating and maintenance costs when review events occur.

Although the 2013 DAAU is silent on how Aurizon Network is incentivised to invest in, and operate the electric assets efficiently, the UUP must reflect only costs associated with volume and under utilisation risks. The UUP must not operate as a catch all to recover costs which are not assessed as efficient or prudent as this would, in effect, immunise Aurizon Network from any failure of prudency related to capital expenditure or to efficiency requirements for operational and maintenance costs related to electric infrastructure in Blackwater.

#### 4.3.4 Limits on price changes:

To avoid price shocks, the introduction of a price review mechanism could include some kind of cap to constrain the size of increases in AT5, should a relief valve operate in a way that would allow the price path to change. A logical point for any such review of the level of AT5 would be at the end of the UT4 period, at which time the impact of changes to Aurizon Network's UT5 WACC may be considered, along with any changes to the coal volume outlook.

#### **Recommendation:**

A review mechanism for the AT5 price should be included to reflect changes in prudent and efficient costs. A cap on the size of increase in the AT5 price should also apply to protect users from price shocks.

A financial incentive for Aurizon Network to negotiate prudent and efficient terms and conditions with Powerlink could be considered.

The 2013 DAAU should clarify how Aurizon Network is incentivised to invest in, and operate the electric assets efficiently, including what the role of the QCA will be (if any) in assessing the prudency and efficient of costs.

### 4.4 The proposed UUP is potentially inequitable

The 2013 DAAU proposes that Aurizon Network may defer revenue recovery until the end of UT4 at which point a UUP may be payable. Aurizon Network may then further defer revenue recovery over the subsequent years until the end of UT5 at which point another UUP may be required if revenue recovered through the AT5 charge is insufficient. Alternatively, the AT5 charge may over recover target revenue, in which case the UUP would represent a refund to access holders.

If the AT5 price is set appropriately, the likelihood of a UUP payment being levied is much reduced. Consequently, the payment of any UUP will only be necessary to the extent that system volumes or electric utilisation varies from the assumptions use to set the AT5 price, the UUP will capture the under, or over, recovery.

In assuming that the AT5 price is set accurately, Aurizon Network is carrying volume and utilisation risk for four years, at which point the risks are transferred to access holders. However, providing for the UUP adjustments to occur at two points that are four years apart, risks temporal inequality between access holders, depending on when an access agreement commences or expires. Given there are only two 'true up' periods, potential exists for access holders with expiring access agreements at year three of UT4, to avoid the costs they were responsible for during the previous three years of the UT4 period, while conversely, access holders with agreements commencing in the later years of UT4 could be liable for UUP payments related to the periods prior to their agreement commencing.

An alternative application of the UUP would be to include an annual UUP payment throughout the eight year period of the price path. More frequent recovery of UUP would also reduce the risk of a large impact of UUP payments that could occur if the accumulated UUP is large and is recovered in one payment. In addition, potentially large

future payments make planning future cashflows more difficult. Further an annual true up would align with the existing arrangements for the management of a revenue cap.

Aurizon acknowledges that offsetting these arguments, deferring the UUP payment for four years allows volatility in revenue recovery to 'smooth' out over the period, with under recovery in one year being offset by potential over recovery in subsequent years. This smoothing potentially provides for less volatility in the charges faced by access holders. However, to the extent that the UUP is only payable in the event that forecasts are incorrect, a more frequent UUP true up is preferable.

#### **Recommendation:**

Aurizon believes the 2013 DAAU should clearly explain the rationale for the four yearly UUP payments, and should provide more detail about the way in which the UUP will apply.

Consideration should be given to an annual UUP 'true up' to reduce the potential for large accumulated UUP costs to be recovered in one payment, and to allow access holders more certainty in forward cashflow planning.

### 4.5 The application of the UUP is unclear

The 2013 DAAU does not explain how the UUP would be implemented, although the attached Sapere Report states that there would be an additional component added to the AT4 tariff. Aurizon request more detail about the way the UUP would be applied, including if the AT4 tariff component has been selected to carry the UUP charge.

Both AT3 and AT4 are allocative components of the reference tariff and could be suitable for levying, or allocating an under (or over) recovery charge such as the UUP. The difference between AT3, which is levied on a net tonne kilometre (ntk) basis and AT4, which is levied on a net tonne (nt) basis, is that AT4 provides a 'distance taper'. Mines further from the port, with longer haul distances are provided some cost relief where the tariff (AT4) does not vary with the number of kilometres.

If the UUP is to be allocated based on volumes, the AT4 component would be appropriate. If the UUP is to be allocated to users in a way that maintains the current cost relativities in the reference tariffs, then it may be appropriate to spread the UUP recovery (refund) between AT3 and AT4. No rationale is provided in the 2013 DAAU, although the Sapere Report<sup>16</sup> indicates that because a simple, objective rule is required, the proposed allocation by net tonnes is the best option.

Another option would be for the UUP (if required) to be paid as a lump sum bullet payment at the end of the UT4 and UT5 periods. The proposed method of allocating such payments between access holders should be made clear. A further option would be to roll any unrecovered revenue into the Regulated Asset Base (RAB) as a form of loss capitalisation. These options are not discussed in the 2013 DAAU.

Similarly, the 2013 DAAU is silent on the treatment of the UUP amounts during the accumulation period prior to the end of the relevant regulatory period. For example, it is not clear if under-recovered revenue will be escalated at the WACC over the period, if so, by how much, or if any over-recovery would be similarly escalated over the period to maintain the value refunded to access holders.

Aurizon requests clarification around the details for application and treatment of the UUP.

#### **Recommendation:**

More detail should be provided about the way the UUP will be applied, such as whether payment will be via an uplift to the AT4 tariff, whether a single bullet payment will be required at each four year period or whether some form of loss capitalisation has been considered.

The 2013 DAAU should also clarify the proposed treatment of the UUP amounts during the accumulation period, such as whether escalation will be applied and if so, at what rate.

### 4.6 Rail operators not included in regulatory pre-approval process

Regulatory pre-approval of the infrastructure investments was based on endorsement by end users, not by access holders, presumably on the assumption that all commercially negotiated rail haulage agreements (many of which were already in place), provided for pass through of access charges to end users.

The regulatory pre-approval process allows the QCA to pre-approve the scope of a proposed capital investment by Aurizon Network where a sufficient proportion of customers endorse the project. This process is implemented via a customer vote, supported by information contained in the Coal Rail Infrastructure Master Plan (CRIMP). Access holders that are not coal producers are not included in the customer vote process.

<sup>&</sup>lt;sup>16</sup> Sapere Report (2013) April 19, p. 14

<sup>2013</sup> DAAU / Aurizon / Submission to the Queensland Competition Authority – 10 June 2013

A large proportion of the Blackwater electric infrastructure assets were endorsed by end users, none of which, at that time, were access holders. However the access charges are levied against access holders, most of which are train operators, not the end users which endorsed the relevant electric assets.

If forecast capital projects are to be required to obtain regulatory pre-approval, given that access holders pay the access charges, it is essential that access holders are included in the pre-endorsement process. Aurizon requests clarification around whether Aurizon Network will seek regulatory pre-endorsement for forecast capital expenditure and requests that access holders be included in the process.

#### **Recommendation:**

The 2013 DAAU should clarify whether Aurizon Network will seek pre-endorsement for forecast capital expenditure and requests that access holders be included in the process.

## 4.7 Legal certainty and the AT5 DAAU

The 2013 DAAU consists of a submission to the QCA and the proposed inclusion of **Schedule K** into UT3. Should the QCA approve the 2013 DAAU, the approval would relate to the inclusion of **Schedule K** as a legally binding part of the access undertaking. The 2013 DAAU submission and supporting material carries no legal status. Consequently, future access seekers and access holders would be guided only by the information in **Schedule K** which would also form the basis for any determinations by the QCA.

**Schedule K** is a brief 'principles' document and does not provide sufficient information for an access seeker or holder to assess the impact of the AT5 arrangements on its business. It does not appear to be intended that **Schedule K** be ready for approval in its current form, including as it does the 'option' as to who pays the UUP. Aurizon requests that **Schedule K** include more detailed technical information to allow access seekers and other stakeholders to more comprehensively assess the impacts of the 2013 DAAU on their interests.

#### **Recommendation:**

**Schedule K** should include more specific information to support the practical implementation of the proposed AT5 price path. Alternatively, more detail should be provided in the text of the access undertaking itself as part of the 2013 Access Undertaking drafting process (or the Standard Access Agreements) around the level and application of the proposal.

### 4.8 Need for a binding ruling

As the regulatory periods cover four years while the proposed price path covers eight years, any pricing arrangements approved by the QCA must span two regulatory periods if stakeholders and Aurizon Network are to be certain about the duration and treatment of the arrangements proposed in the 2013 DAAU. The QCA Act provides for a binding ruling<sup>17</sup> that can be made by the QCA should it consider this appropriate. An owner or operator of a service must make an application for the ruling.

Aurizon understands from Aurizon Network that it is contemplated that such an application will be made in the future. However, the 2013 DAAU does not seek such a ruling from the QCA, nor does it provide any indication or justification for the requirement, or otherwise, for a binding ruling.<sup>18</sup> No information is provided about the impact of such a binding ruling on access holders (if any), nor the process by which such a ruling would be implemented.

Aurizon requests information about the way in which Aurizon Network will provide certainty to stakeholders over the eight year period.

#### **Recommendation:**

The 2013 DAAU should include information about how the proposed pricing arrangement will be locked in over two regulatory periods, including whether (and if so, when) Aurizon Network intends to apply for a binding ruling, and what the likely content of that ruling will be.

## 4.9 Interaction of AT5 with the proposed AT5 transitional tariff

Aurizon acknowledges that the transition between regulatory periods, including the transition between the UT3 and UT4, is potentially a time of considerable uncertainty, particularly around the timing that new arrangements may be approved and the date at which they will commence. In particular, with respect to the AT5 price in Blackwater, Aurizon is aware of three separate publically available proposed price levels for AT5 in 2013/14.

<sup>&</sup>lt;sup>17</sup> QCA Act, Div. 7A

<sup>&</sup>lt;sup>18</sup> The Sapere Report makes reference to the need for a binding ruling, p.5

As noted, the 2013 DAAU submitted to the QCA on 24 April proposes an AT5 tariff of \$3.05/'000egtk. This price is based on UT3 assumptions (WACC etc) and on UT4 forecast volumes + UT5 forecast volumes. The expectation is that the \$3.05/'000egtk will be lower once the (lower) UT4 WACC is applied.

The proposed UT4 submitted to the QCA on 30 April proposes an AT5 tariff of \$2.75/'000egtk based on UT4 inputs (i.e. the proposed UT4 WACC of 8.18% and the UT4 forecast volumes) and on the application of the methodology in the 2013 DAAU (i.e. fixed eight year price path)

The QCA has approved (draft decision) the transitional tariffs for 2013/14 including a Blackwater AT5 of \$3.49/'000egtk. Aurizon understands that this is based on UT3 inputs, a Queensland Resources Council (QRC) endorsed WACC and adjustment for the 2013 DAAU pricing proposal.

Aurizon acknowledges that the AT5 price applied to Blackwater electric traction will be at the level that is eventually approved by the QCA as part of UT4. In the interim, the transitional tariffs that are approved by the QCA will apply, with the difference between revenue collected while the transitional tariffs are in place and the revenue that should have been collected at the AT5 price approved as part of UT4, being recovered or refunded by Aurizon Network, as the case may be.

Aurizon assumes that any mismatch in revenue will be corrected through adjustment charges after UT4 is approved. However, to the extent that the UUP is designed to collect under or over recovered revenue against the assumptions in the price path, potential exists for Aurizon Network to roll the adjustment charge amounts into the UUP. Aurizon seeks clarification about the intended process for dealing with adjustment charges related to Blackwater AT5 revenue.

#### **Recommendation:**

The 2013 DAAU should clarify the intended treatment of transitional tariff revenue once UT4 is approved, including whether adjustments charges will apply or whether any under or over recovered revenue is to be rolled into the UUP.

## 5. Conclusion

Aurizon remains committed to working with customers to resolve the pricing of access to electric traction in Blackwater, particularly to ensure that the AT5 price is efficient and is based on the costs of providing the service. As an above rail operator facing a highly competitive rail haulage market, Aurizon continues to work with customers to ensure their commercial interests are understood and promoted, particularly given their current focus on reducing costs and improving efficiency.

The 2013 DAAU is an encouraging development in the ongoing process to resolve the issues resulting from the current average-cost based pricing for AT5. In assisting with this process, Aurizon has identified areas in the proposed pricing arrangements which require further refinement and more detailed information before access holders and other stakeholders can properly assess its impact on their businesses.

Aurizon looks forward to further engagement on the pricing arrangements for electric traction in Blackwater to ensure that they provide sufficient certainty and incentives to support the ongoing efficiency and competitiveness of the coal supply chain.