QRC submission to the QCA
Electric Traction Services DAAU
September 2012
1. Background

On 16 December 2011, QRN submitted a DAAU to the QCA which proposed to amend the current Access Undertaking (UT3) to:

(a) introduce a single network AT5 charge, combining the total costs and total forecast demand of the Blackwater and Goonyella electric networks;

(b) introduce a requirement that operators pay AT5 for at least 90% of train services that could feasibly be operated with electric trains, including services actually operated with diesel trains; and

(c) limit AT5 revenue cap adjustments to 5% per annum.

The QCA provided interested stakeholders with the opportunity to make submissions in relation to QRN’s draft amendment. Many of the QRC’s members made submissions. All but one of those submissions opposed the DAAU.

In July 2012 the QCA released a draft decision which proposed to reject the DAAU (Draft Decision). The QCA has provided interested stakeholders with an opportunity to make further submissions in response to the Draft Decision.

This submission sets out the QRC’s key comments on the Draft Decision, with a focus on how the issues raised in the DAAU and the Draft Decision should be addressed. The submissions by the QRC’s members on the DAAU were extensive. This submission does not supersede the comments made by any member in those submissions, but rather responds specifically to matters raised in the Draft Decision and provides suggestions on a way forward.

It is noted that QRC members may also provide submissions on the Draft Decision on an individual basis.

QRC confirms that this submission may be made publically available.

2. Summary

Individual QRC members face vastly different exposures in regard to this issue. The continuing increases in the AT5 charges in the Blackwater System are having a severe impact on certain coal producers. These producers have been raising this issue and seeking a solution since at least as far back as 2006, when QR Network elected to defer depreciation charges for Blackwater electric assets.

All QRC coal producer members understand the concerns of these producers and consider that a solution must be found and implemented urgently. However, support for the proposals put forward by QR Network to date is extremely limited. QRC members generally support the QCA’s proposal to reject the amendments to UT3 in respect of electric traction services as proposed by QRN. However, QRC considers that this rejection should be accompanied by recommendations from the QCA as to how this matter will be resolved. This submission includes suggested solutions.

In regard to the existing DAAU, the QRC concurs with the QCA’s draft determination that the amendments do not meet the criteria which must be satisfied in order for the amendments to be approved. In particular, it is the QRC’s view that QRN’s proposal:
QRC - is an inappropriate attempt by QRN to effectively mandate the use of electric traction;
- would, if approved, undermine above-rail competition; and
- would, if approved, be a significant and unprecedented disruption to the regulatory environment to the detriment of a large portion of industry.

Key comments on each of these issues are set out in Section 3.

Section 4 explains the issue to be addressed, while a suggested future approach (in lieu of the amendments proposed by QRN) has been set out a section 5.

3. Views on the Draft Decision

General comments
The QRC supports the QCA’s analysis that the DAAU does not meet the criteria established in section 138(2) of the QCA Act. In the QRC’s view, there are three key problems with QRN’s proposal which have been appropriately reflected in the QCA’s analysis. It is important to understand these problems in order to identify what the appropriate future course of action may be (other than not approving the DAAU).

DAAU is an inappropriate attempt to impose electric traction
The DAAU is premised on an assumption that electric traction is more economically efficient than diesel traction or a traction mix which is more than 10% diesel. QRN’s submission supporting the DAAU presented this as the primary issue to be considered in assessing the DAAU. The QCA did not agree with either assumption. The Draft Decision notes that:
- QRN has not established that electric traction is more economically efficient than diesel traction or mixed traction; and
- therefore, a pricing regime which encourages use of electric traction over diesel or mixed traction will not necessarily lead to economically efficient outcomes (and may in fact lead to adverse outcomes, for example by encouraging over-investment in electric infrastructure); and
- if the current structure of AT5 is resulting in inappropriate price signals, this should be addressed by a redesign of AT5 and not through implementing the DAAU.

Most stakeholder submissions on the DAAU did not consider that QRN has demonstrated that electric traction has a lower total cost of ownership (TCO) than diesel or mixed traction. Many stakeholders noted that analysis presented by QRN in its supporting submission was incomplete and some stakeholders presented alternative analysis which resulted in different conclusions to those reached by QRN.

QRC does not have adequate information on which to base a view on the most efficient traction choice, and considers that disrupting existing pricing methodologies is a serious matter which should be considered only where there is a clear and compelling reason to do so. In this case, even if it was demonstrated that electric traction has a clear advantage over diesel, and further demonstrated that operators and customers will fail to choose this superior alternative in the absence of changes to pricing, it does not follow that the pricing regime should penalise users for adopting a different traction choice to that which is the most economically efficient. Rather, the regime should result in users bearing the real costs of their choice (which would be higher for whichever traction choice is less efficient).

The DAAU starts from a problematic assumption and then attempts to alter the pricing regime to create a penalty for departing from the assumption. As the QCA has noted, this cannot be said to
result in more efficient outcomes and may in fact increase inefficient outcomes (including over-
investment).

An efficient pricing mechanism would ensure that the costs of inefficient choices would be borne by
those making the choices (therefore incentivising users to choose the most economically efficient
option). That is not the case for the changes proposed by QRN, which instead create a penalty, which
is not cost reflective, for use of diesel traction (by requiring users to pay for infrastructure which they
do not utilise).

In the QRC’s view, the changes are an attempt to have substantially all services in the Blackwater
system operate as electric traction services by penalising the operation of anything else above a
minimal threshold and by artificially suppressing the Blackwater price (via cross-subsidy from
Goonyella users).

**DAAU would undermine competition**

The adverse impacts of the changes proposed in the DAAU would include:

- increased costs for all Goonyella users;
- increased costs for Blackwater diesel users; and
- increased asset stranding risk and potential loss of business for Pacific National (as the
  predominantly diesel above rail provider in the Blackwater system).

This is both a wide and large group of potentially affected stakeholders.

By contrast, the likely benefits from and beneficiaries of the changes are:

- QRN, in the form of decreased asset stranding risk;
- QR National, in the form of decreased asset stranding risk and potential gain of business; and
- Blackwater electric users, in the form of a stabilised and lowered AT5 tariff.

The difference in the nature of the adverse impacts – and by whom they are felt – shows that the
DAAU is likely to have the effect of decreasing competition in the above rail market with corresponding
long-term impairment of productivity and efficiency in the above and below rail markets. This was
recognised by the QCA.

**DAAU would undermine regulatory certainty**

The DAAU proposes significant changes to the prices payable by Blackwater and Goonyella system
users. This would be a major change from the regulatory environment existing at the time that UT3
was implemented and relevant haulage agreements were entered into.

The QCA has recognised that such a major change midway during a regulatory period is undesirable,
particularly when its utility and the reasons for the change are questionable. The QRC supports this
view. As noted in a number of stakeholder submissions, there is no precedent or justification for such
a fundamental change during a regulatory period. Even at the commencement of a new regulatory
period, absent compelling reasons for it, significant change in pricing regimes or other conditions of
access are undesirable as a large number of commercial decisions will have been made based on the
existing provisions.

The issues raised by the DAAU do show that there is a need for change. However, this change is to
address a misalignment between QRN’s investments and user demand. This is different to the
intention and the effect of the DAAU. The QRC is of the view that these issues should be addressed
not through a reconstruction of the pricing regime, but through action which QRN has itself
foreshadowed as an appropriate response. This is addressed in the next section.
4. The issue to be addressed

The risk of falling demand for electric infrastructure

The two principle issues which the DAAU appears to be designed to address are:

- the difference between the investments made by QRN in Blackwater system electric infrastructure to increase ability of electric rolling stock to utilise the system (Electric Expenditure) and the actual utilisation of and demand for that infrastructure; and

- the corresponding detriment which is suffered or is likely to be suffered by QR National as a predominantly electric above rail provider.

The first issue is a case of demand risk. It is a risk which QRN has long been aware of. As early as 2006, QRN was aware that their intent to heavily invest in Blackwater electric infrastructure may lead to asset stranding in the face of falling demand, with the corresponding result that the surplus investment would be borne by QRN (see further at section 4.2). The QRC has likewise repeatedly highlighted that a situation has been developing in the Blackwater system where:

- there is inadequate demand to support the costs of the electric infrastructure; and

- continuing increases in AT5 tariffs are providing increasing disincentives to use the infrastructure.

The Draft decision recognised that this issue cannot be said to be ‘new’ and has been the subject of numerous previous submissions by the QRC and its members.

How UT3 provides for and QRN has contemplated that this risk would be dealt with

Demand risk is the subject of existing mechanisms within UT3. Clause 1.4(b) of Schedule A of UT3 allows the QCA to optimise parts of capital expenditure in a number of situations. Relevantly, this includes the situation that:

- demand has deteriorated; and

- regulated prices on an unoptimised asset would result in a further decline in demand (ie., the effect of retaining the current regulated asset base (RAB) without optimisation would be to further decrease demand).

QRN in its submission accompanying the DAAU suggests that if the current RAB is maintained, that use of electric services will continue to decline:

“QR Network is at risk of not recovering the costs of its electrification assets on the Blackwater system due to pricing distortions in favour of diesel leading to declining electric utilisation.”

This is a logical eventuality given that the AT5 tariff is funded based on users paying the full cost of the Electric Expenditure in proportion to the total Gtks of electric users. The less users are paying the tariff, the more expensive the tariff becomes, which makes it more likely further users will abandon electric services.

As noted above, the potential for the Electric Expenditure to be optimised has previously been acknowledged by QRN as a likely outcome if demand for electric services did not increase. In QRN’s 2006 submission in relation to UT2 QRN stated that:

“It is QR’s expectation that the use of electric consists in Blackwater will increase in subsequent regulatory periods.

Given current market factors are contributing to the lower than expected utilisation of electric assets in Blackwater, QR has decided to adopt a long term perspective in resolving industry concerns with respect to Blackwater’s AT5 tariff. Specifically, in the 9 June 2006 Version, QR has sculpted the depreciation profile of Blackwater’s electric assets in response to the expected
utilisation of the assets over the life of the assets whilst still enabling QR to recover the legitimate commercial costs of its electrification assets.

This means QR has reduced the depreciation charged on the assets during the period of low utilisation in the 2005 regulatory period, with the expectation that as utilisation subsequently increases (in future regulatory periods), the depreciation profile will be accordingly accelerated. The main impact of this approach is to smooth the price of Blackwater’s electric assets between regulatory periods.

QR’s proposal to sculpt the depreciation schedule has been specifically developed in response to industry concerns regarding the increase in the AT5 tariff over the 2005 regulatory period. QR is aware that this proposal may affect its future ability to fully recover the legitimate commercial costs of its electrification assets over the life of the assets. Such an outcome might occur if QR’s expected future increase in the utilisation of Blackwater electric assets is not forthcoming in subsequently regulatory periods. Under this scenario, I acknowledge that the Blackwater’s electric assets could meet the criteria in Paragraph 1.4(b) of Schedule FB, thus leading to the QCA potentially requiring a reduction in the value of the assets in the Regulatory Asset Base.” [Bolding added].

5. What should happen next

As is discussed above, a solution to this issue must be found and that solution must not involve shifting charges in a way which is not cost reflective.

QRC considers that:

- QRN should voluntarily reduce AT5 to a level which QRN considers is supported by demand, such that this price ceases to be the cause of further declines in demand. In order for this to be effective, certainty in the form of a long term price path will need to be provided. If QRN’s analysis is correct, we would expect that this would result in a shift towards electric traction over time, based on the lower whole of life cost which has been identified in QRN’s analysis; and

- If QCA considers that QRN’s response in regard to the above suggestion is inadequate to address this issue, then the QCA should consider whether the criteria for optimisation have been met.

Optimisation of electric assets

The optimisation provisions in clause 1.4 of schedule A are clearly intended to deal with a situation such as the present, where demand has been declining and is apt to further decline under the current pricing regime.

It is noted that QRN has framed this expenditure as having been already ‘approved’ by relevant access holders and customers. This is not a relevant consideration as to whether or not the expenditure should be optimised. The optimisation provision (clause 1.4 of Schedule A) is not stated to be subject to the customer approval process (clause 3.2 of Schedule A) and there is nothing in UT3 to suggest that it must be read as subject to customer approval. The customer approval process is undertaken months or years prior to the assets being commissioned. In contrast, the grounds for a reduction of assets in accordance with clause 1.4 Schedule A are forward-looking (in particular clause 1.4(b)-(c)).

It is also noted that the customer approval process for recent investment in electric infrastructure was based on high level information only. The approval for Blackwater system electric capability given via the customer approval process was not predicated on an understanding that such investments would only be viable if supported by a significant shift in the diesel/electric mix, nor on a fundamental
restructure of pricing involving a move away from a cost reflective approach to the socialisation of charges across systems and the levying of ATS of diesel trains.

The customer approval process does not serve to absolve QRN of optimisation risk, which is clearly increased where decisions are based on demand forecasts rather than contracts. It would be particularly incongruous for the QRC’s members to be required to bear this risk in the present circumstances, where:

- QRN itself acknowledged that, if the electric expenditure is not utilised to the levels anticipated or hoped for by QRN, that the criteria for reduction in the value of assets may be met; and
- the QRC and its members have repeatedly raised this as an issue and proposed that action be taken.

Furthermore, in no way could it be suggested that the customer approval process is a commitment to provide demand for electric traction. At the time of the customer approval process customers do not have any knowledge of the demand of other customers for electric traction. The only party in a position to make an assessment of demand for electric traction is QRN.

**Potential for improved understanding of traction choice**

It is in the interests of all stakeholders that QRN’s investment decisions result in delivery of infrastructure for which there is sufficient demand and for which QRN can earn an appropriate return in accordance with the prevailing access undertaking.

The DAAU, most stakeholder submissions and the Draft Decision have all considered the relative efficiencies of electric, diesel and mixed traction. The Draft Decision comments that further attention (including peer review) to the TCO analysis may be appropriate.

It is noted that certain QRC members have had some interaction with QRN in this regard. As noted above, some members of the QRC have undertaken their own TCO analysis using assumptions from their own experiences, with differing results from those obtained by QRN. These differences should caution against relying on such an analysis as the basis for crafting a pricing regime.

In this regard, the Draft Decision notes that traction choice should be determined by market forces. As explained above, the QRC shares this view. However, the TCO analysis is likely to be informative to all stakeholders and may assist in their decision making. Again, dialogue between QRN and its customers is likely to assist in this regard. The sooner QRN is aware of its customers’ likely choices regarding traction, the sooner it can craft its own investment decisions appropriately.