AURIZON

Professor Roy Green
Chairman
Queensland Competition Authority
Level 27, 145 Ann St
Brisbane, QLD 4000

Response to Draft Decision on the WIRP Pricing

25 September 2015

Dear Roy,

Aurizon Operations (**Aurizon**) welcomes the opportunity to provide comments on the Queensland Competition Authority's (**QCA**) draft decision on the Wiggins Island Rail Project (**WIRP**) pricing. Our comments are primarily focussed on those aspects of the draft decision which relate to the consequential impact on the AT5 tariffs in the Blackwater system. This submission complements issues previously raised in Aurizon's submission in May 2015 on the draft decision on the 2014 Draft Access Undertaking (**2014DAU**).

In relation to AT5 pricing in Blackwater, a considerable number of issues were raised in Aurizon's submission in response to the January draft decision and it is unclear how these issues have been addressed in the WIRP draft decision (**Draft Decision**). This is particularly relevant to the Rolleston AT5 tariff given the investment in electrification of the spur line is not a component of the WIRP project. However, the Draft Decision has produced significantly different outcomes from those of the January draft decision which resulted in a socialised system price for AT5 as shown in Table 1.

Table 1. January 2015 Draft Decision AT5 Rates

AT5 Rates $/000 egtk	2014-15	2015-16	2016-17
Blackwater System	4.37	3.87	3.19
Rolleston	6.22	3.87	3.19

The Draft Decision has not reconciled how the Rolleston AT5 rate for the electrification of the branchline can be fully socialised with the Blackwater system without the inclusion of WICET electric services and be subject to a significant price premium following the inclusion of the WIRP project.

Aurizon also notes that the electrification of WIRP related expansions, including the electrification of the Rolleston branchline was not included within the WIRP access conditions. As a consequence, consideration of AT5 tariffs associated with further investment in the overhead power system assets in the Blackwater system should be considered independently from the rail infrastructure assets within the AT2-4 rates and not have regard to the WIRP Access Conditions.

The WIRP draft decision as it relates to the AT5 tariff

The primary basis of the QCA's assessment of the pricing outcomes is the allocation of the respective project costs. In relation to the allocation of investments and costs pertaining to the overhead power system the Draft Decision does not sufficiently detail the nature, quantum or allocations of those costs. This is particularly evident with the Draft Decision:

- referring to replacement of major components of the Callemondah Feeder Station within the scope of the Wiggins Island Balloon loop[1]. While this work was undertaken concurrently with construction of the balloon loop the requirement for the works was independent of the WIRP project and reflects asset renewal to support existing volumes;
- stating the Authority considers that a portion of the Wiggins Island Balloon Loop should be allocated to existing Blackwater train services. The Draft Decision does not detail the proportion or the basis of its derivation; and
- not identifying the incremental revenues attributable to the allocated costs.

In determining the reference tariffs for Rolleston, the Draft Decision notes that the tariffs reflect the:

- Rolleston mine specific spur line costs plus a minimum Contribution to Common Costs **(CCC)** for the access rights for train services unloading at non-WICET destinations;
- The allocation of WIRP project costs attributable to the additional access rights for train services unloading at WICET; and
- Rolleston electrification costs, since the incremental cost of this new electric investment results in a higher tariff than the Blackwater AT5 tariff.

In relation to the WIRP project costs, the Draft Decision does not specifically state the basis of the allocation for incremental mainline overhead power system expansions (i.e. gtk or egtk and whether it is total haul distance or the relevant tonne kilometre over the expansion track kilometres).

The application of the socialisation test in the Draft Decision does not independently assess electric and non-electric investment. The comparison of the socialised price against the baseline system price in Table 13 only applies to the aggregate price inclusive of AT1 to AT5. Given the current pricing structure and the ability to substitute electric services it would be distortionary and perverse to apply a system premium to AT5 if a contribution to electric costs is being made as a consequence of failing the system test in aggregate.

The Draft Decision also does not appear to assess the socialised system AT5 tariff inclusive of Rolleston and WIRP electrification costs. The practical consequence of the exclusion of this assessment is that stakeholders are not fully informed as to whether the Draft Decision is consistent with the matters the QCA must have regard under s.138(2) of the QCA Act. In not assessing AT5 independently the Draft Decision can yield price outcomes which are inconsistent with promoting the efficient use of, operation and investment in overhead power systems. The Draft Decision outcomes for AT5 are therefore summarised as shown in Table 2.

[1] Draft Decision, Table 2, p. 2

Table 2. WIRP Draft Decision AT5 Rates

AT5 Rates $/000 egtk	2015-16	2016-17
Blackwater System	3.60	2.79
Rolleston	4.04	3.41

The Rolleston AT5 rates in the Draft Decision are materially in excess of the estimated incremental cost of electrification of the Rolleston Branchline of $2.34 per '000 egtk included in the April 2013 draft access undertaking[2]. The implications of the Draft Decision are to render a prudent ex-ante investment decision to electrify the branchline as uneconomic by virtue of the price outcomes without any detailed consideration of the regulatory or commercial risks.

The Draft Decision also does not appear to reflect the QCA's principle for the pricing of expansions as reproduced as follows[3]:

- *The user requiring the expansion should generally pay an access charge that reflects the full incremental costs of access;*
- *Existing users should not experience a material increase in tariffs due to an expansion triggered by access seekers;*
- *If a new/expanding user faces a higher cost than existing users a zero CCC from expanding users is generally acceptable; and*
- *An allocation of expansion costs to existing users may be appropriate where an expansion has clear benefits to those users.*

Therefore, application of these principles would require that no expansion user is required to pay a system premium on AT5 where the existing user's AT5 tariff is lower than it otherwise would be without the expansion user.

This test does not appear to be satisfied given the Blackwater AT5 rate of $2.79 in Table 2 is substantially below the pre-WIRP rate of $3.19 in Table 1.

Request for further information

In order to assess whether the test described above has been satisfied, Aurizon sought further information from the access provider as to whether the critical assumptions that underpin the Draft Decision outcomes for AT5 result in Rolleston being required to make a contribution to the common costs for the overhead power system. Aurizon was advised by the access provider that it was unable to improve our understanding as the QCA had not provided a sufficient level of detail which would allow any accurate conclusions to be drawn.

---

[2] Aurizon Network (2013) 2013 Draft Access Undertaking: Volume 3 – Maximum Allowable Revenue and Reference Tariffs, Table 40, p. 159.

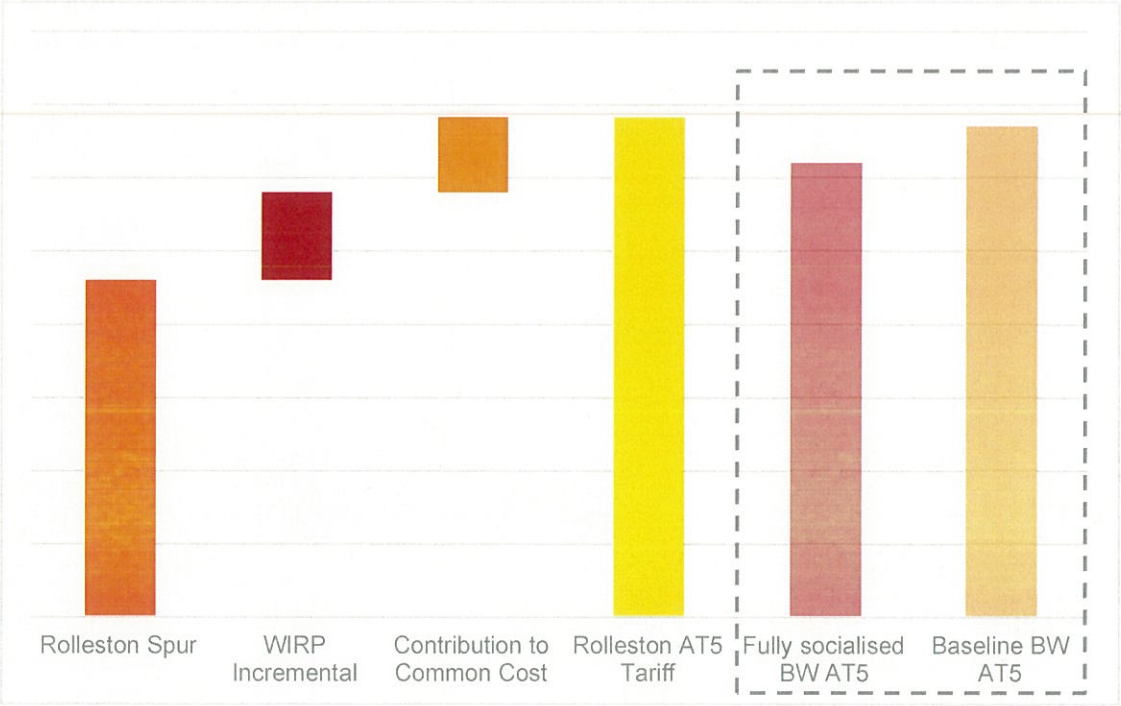
[3] Draft Decision, p. 46

Aurizon made a subsequent information request from the QCA for the following data:

- the AT5 system allowable revenue without Rolleston and WIRP;
- the incremental system allowable revenue for WIRP electrification;
- the incremental system allowable revenue for Rolleston electrification;
- the AT5 revenue attributable to Rolleston electric train services based on the applied volumes and tariffs in the Draft Decision; and
- the fully socialised Blackwater AT5.

The purpose of the information is to consider the test discussed above and assess the magnitude of any contribution to common costs Rolleston is making to the overhead power system. This is demonstrated in the indicative graph in Figure 1.

Figure 1. Indicative Disaggregation of Rolleston AT5 Revenue and System Test



Notwithstanding Aurizon being the only operator of electric train services in the Blackwater system, the QCA responded to this request by stating it would not be able to provide the information as it would need to provide the same information to all stakeholders to ensure that one stakeholder does not obtain an unfair advantage over another and that it would lead to the disclosure of commercially sensitive information.

Aurizon understands the concerns of the QCA regarding the disclosure of commercially sensitive information but notes that the lack of transparency of the regulator's assumptions and economic model makes it difficult to scrutinise the regulator's performance and identify potential regulatory errors. The inability for the regulator's analysis and modelling to be subject to independent review substantially reduces regulatory accountability, increases regulatory risk and does not constitute good regulatory practice.

All revenue and tariff modelling undertaken by the QCA should be provided to the access provider at the time a decision is released by the regulator. Aurizon considers that limiting the information provided to the access provider to only that information it can provide to all stakeholders would be inconsistent with underlying principles of the access regime.

The QCA is assessing a voluntary draft access undertaking submitted to it by an access provider. That submission is accompanied by revenue and tariff modelling and explanatory materials which will comprise confidential information. As such, any information asymmetry between the access provider and other stakeholders exists because it is the information given to the regulator. Where the QCA rejects the access provider's proposal, it is required to provide reasons for the rejection[4]. The withholding of the QCA's revenue and tariff modelling and all relevant information to the inputs for that model, such as volumes, from the access provider is to substitute parts of the Draft Access Undertaking with its own.

Aurizon would have greater confidence in the effectiveness of the regulatory regime where it is able to rely on the presumption that sufficient information is being provided to the access provider to ensure that regulatory errors are detectable.

The remainder of this submission addresses matters Aurizon considers to be relevant to the determination of the Rolleston and Blackwater AT5.

Rolleston contribution to Blackwater common costs

The expansion principles applied by the QCA in the both the January 2015 and WIRP Draft Decisions would require that the Rolleston AT5 rate should not include any contribution to common costs as the rate exceeds the Blackwater system AT5 rate.

Aurizon notes that in respect to the overhead power system successive approved access undertakings have not specifically required a contribution to common costs.

- **UT1**. The 2001 access undertaking does not distinguish between electric and non-electric services and simply referred to the requirement that '*the new Reference Train Service will make a contribution towards QR's common costs*'[5];
- **UT2**. The 2005 access undertaking included a specific requirement in relation to electric investment which specified *'the minimum Common Cost contributions for the use of electrical infrastructure will be determined in each case, taking into account all of the relevant circumstances, consistent with the principles underlying the Common Cost contributions in respect of Rail Infrastructure that is not electrical infrastructure'*[6]; and
- **UT3**. The 2010 access undertaking required no specific percentage of AT5 as representing a contribution to common costs with the minimum contribution to common costs limited only to the non-electric tariff components[7].

Importantly, past master plan voting has excluded Rolleston from the electrification investment on the grounds that it was not subject to a reference tariff which would be affected by the inclusion of those investments in the regulatory asset base. As such, there is no regulatory compact which would require the Rolleston AT5 tariff to include a contribution to investment in the Blackwater feeder stations which were approved through the master plan vote on the expectation of sustainable utilisation in the absence of additional electric volumes through the electrification of the Rolleston branchline.

---

4 QCA Act, section 140(2).

5 2001 Access Undertaking, clause 6.3.3(b)(i)

6 2006 Access Undertaking, Schedule F, Part B, section 4.1

7 2010 Access Undertaking, Schedule F, Part B, section 4.1.1

The expansion of the linear overhead power system is inherently lumpy and not partially scalable. The incremental expansion may therefore include capacity above the immediate demand required without the Rolleston electrification. Accordingly, the demand for electric train services by Rolleston does not crowd out alternate demand which would make a greater contribution to common costs.

There is no prima facie case for Rolleston electric train services to make a contribution to the electric common costs in the Blackwater system where its AT5 rate exceeds the system rate. In doing so, the AT5 rate will substantially increase the asset stranding risks of the investment in the branchline and undermine the economic viability of investment in rollingstock required for the efficient utilisation of rail transport infrastructure.

Rolleston mainline incremental costs

Aurizon expects that some incremental operating costs on the mainline will be attributable to the increased demand for electric traction services in the Blackwater system. These will be associated with:

- the potential increased risks of dewirements;
- the potential increase in the variable maintenance costs; and
- an increase in the demand based transmission use of system costs (TUOS).

The incremental costs associated with the first and second of these matters is negligible with no defined marginal costs of use of the overhead power system.

There is likely to be an increase in the general common use of system charges due to the demand based approach adopted in Powerlink pricing methodology. However, these components represent a minor proportion of the total charges for transmission services with the total costs largely dominated by the fixed connection fees which are based on the transmission network service provider's capital costs (and are not avoidable costs associated with Rolleston services).

However, contrary to the conclusions in the Draft Decision regarding the lack of any detail of benefits, there are clear and evident efficiency offsets associated with electrification of the Rolleston branchline and WIRP. The benefits from the increased demand are associated with:

- improvement in energy use efficiency which lowers the unit costs of both TOUS and the EC costs. These efficiencies were modelled in the MWhr/egtk graph in Figure 30 of the 2013DAU[8] and show a reduction in energy use through higher system utilisation; and
- decrease in cycle times associated with the full duplication of the Blackwater mainline and the removal of stop-start delays. This also contributes to reducing diesel and electric energy use. These benefits should be readily apparent through the average transit times for a sample of mines before and after full duplication.

The need to quantify these benefits and whether they exceed the incremental costs is dependent on the relativity of the contribution to electric common costs to the pro-rata demand based allocation of TUOS charges (only for the relevant mainline segments). Alternatively, where Rolleston is required to pay an AT5 rate which is consistent with its incremental costs, the value of these benefits should be transferred to the system price. This is consistent with the QCA's expansion principles.

---

[8] Aurizon Network (2013) 2013 Draft Access Undertaking: Volume 3 – Maximum Allowable Revenue and Reference Tariffs, Figure 30, p. 253

Blackwater with and without Rolleston electrification

The expansion principles also require that "*Existing users should not experience a material increase in tariffs due to an expansion triggered by access seekers*".

This principle should also be expanded to require that existing users should not obtain a material reduction in tariffs due to an expansion triggered by an access seeker if that access seeker is required to pay a higher cost of access (this is particularly relevant as AT5 is a linear rate).

Non-compliance with this principle would give rise to unfair differentiation between access seekers in a way that has a material effect on the ability of an access seeker to compete with other access seekers[9]. It also represents discriminatory pricing which cannot be attributed to any difference in cost or risk[10].

This effectively requires a counterfactual with and without test. In other words, for the Draft Decision to be reasonable and meet the requirements of s.138(2) of the QCA Act, the QCA would need to demonstrate that the Blackwater AT5 rate of $2.79 is not lower than the rate that would prevail if the Rolleston electrification and the WIRP project had not occurred.

For example, adopting a conservative position from the UT4 public model:

- a system allowable revenue of $88.4 million (2013/14 electric SAR); and
- a volume assumption of 26,607,072 thousand egtk (2014/15 electric volumes)

produces an indicative baseline AT5 rate of $3.33 which is approximately 20% greater than the FY17 AT5 rate in the Draft Decision of $2.79.

On balance, using information from the Draft Decision and the 2013DAU, Aurizon does not consider that the AT5 rates in the Draft Decision to be consistent with the matters the QCA is required to have regard to in approving or rejecting a draft access undertaking.

The matters discussed above need to be considered against the broader policy issues relating to the pricing of electric train services in the Blackwater system and the prior submissions given to the QCA.

In addition to those matters, Aurizon remains concerned that the fully socialised AT5 rate will remain artificially high as a consequence of the decisions of individual access seekers to bypass part of the declared service. In the absence of any consequence for imposing higher access costs on other network users, those parties lack any incentives to consider alternate commercial approaches to maximising asset utilisation and net efficiency[11]. In addressing this issue of systematic underutilisation of rail transport infrastructure, the promotion of competition in an upstream or downstream market is not a relevant matter the QCA should have regard to for the reasons outlined below.

---

[9] QCA Act (1997) section 100(2)

[10] Ibid. section 168A(c)

[11] For example, any compensation costs associated with switching is potentially substantially lower than any transfers to one or more parties to ensure the AT5 rate reflects an efficient price.

Competition for the declared service

Aurizon remains concerned that the QCA is seeking to promote competition between diesel fuelled locomotives and electric fuelled locomotives where it has no statutory mandate or requirement to promote competition for the declared service itself.

The declared service is the use of rail transport infrastructure in a coal system for providing transportation by rail[12] where rail transport infrastructure also comprises overhead electrical power supply systems[13].

The role and use of the overhead electrical power supply systems is solely for the transfer of electricity to the electric traction motors on a locomotive. As a consequence, the declared service also comprises the distribution of electricity for the purpose of powering a locomotive.

A direct substitute for this service is the supply, distribution, storage and use of diesel fuel and the generation of electricity by on-board diesel power plants for the purpose of providing electricity to the locomotive's electric traction motors.

The role of the access regime and the purpose of access under Part 5 of the QCA Act is to promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service itself. Facilitating access to the declared service by diesel fuelled locomotives, other than where the service also requires the use of non-electrified parts of the coal system, is promoting competition in the market for the declared service. This outcome is contradictory to the objects of Part 5[14] which requires access to:

> *promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets.*

The use of the declared service by diesel fuelled locomotives:

- Does not result in the economically efficient use of the overhead power system;
- Does not promote the economically efficient investment in the overhead power system; and
- Will not have the effect of promoting effective competition in the rail haulage market.

The rail haulage market is already effectively competitive with the use of electric fuelled locomotives as is readily apparent in the Goonyella system with three operators using electric locomotives. There are also no barriers to entry in the market for the supply of electric locomotives which would prevent an access seeker from being able to effectively compete in the rail haulage market[15].

The role of the access regime is to promote the efficient investment in the overhead electrical power supply systems. This should be limited to assessing whether it is economically and technically feasible to expand the capacity of the overhead electrical power supply systems or to extend its geographical reach. Once the investment has been made in rail transport infrastructure, including overhead electrical power supply systems, the access regime should then promote and support the

---

12 Section 250 of the Queensland Competition Authority Act 1997.

13 As defined in the *Transport Infrastructure Act (Qld) 1994*.

14 Section 69E of the *Queensland Competition Authority Act (Qld) 1997*.

15 There is also no evidence to suggest that requiring an access seeker to utilise the overhead electrical power supply systems would adversely affect competition in the markets of seaborne trade in thermal or metallurgical coal or any other market.

economically efficient use of those systems. Given the substantial economies of scale, this necessitates the implementation of appropriate pricing and administrative controls to maximise the utilisation of the overhead system capacity. In approving the access undertaking, the QCA should reduce incentives to bypass the overhead electrical power supply systems and avoid promoting competition for part of the declared service without proper consideration of the economic impacts of doing so.

Recommendations

In considering whether to approve or reject the 2014DAU, the QCA should address, and clearly demonstrate, the following matters:

- the socialisation test for the AT5 rate should be conducted independently from the non-electric investments;
- the baseline AT5 rate for the Blackwater system without the WIRP or Rolleston electrification;
- the incremental costs and associated system allowable revenue attributable to electric train service utilising the Rolleston branchline;
- any contribution to common costs the electric train services utilising the Rolleston branchline are required to make and the economic basis for that contribution, including to what extent regard has been given to the benefits to existing users from increased system efficiency; and
- how users of the electric traction services in the Blackwater system are not funding investments which have been undertaken and are underutilised due to decisions by access seekers to bypass the declared service.

Aurizon extends an invitation to the QCA to discuss the matters raised in this and earlier submissions in relation to AT5 rates in the Blackwater system.

Should you have any questions in relation to either this submission please contact Dean Gannaway, Principal Regulatory Economist by phone on (07) 3019 2055 or by email at dean.gannaway@aurizon.com.au.

Kind regards,

John Short
Vice President National Policy