AURIZON

Mr John Hindmarsh
Chief Executive Officer
Queensland Competition Authority
Level 27, 145 Ann Street
BRISBANE QLD 4000

**Aurizon Network Submission on DBCT 2015 Draft Access Undertaking Draft Decision**

8 July 2016

Dear John,

Aurizon Network welcomes the opportunity to provide this submission in relation to the Queensland Competition Authority (QCA)'s Draft Decision on Dalrymple Bay Coal Terminal (DBCT) 2015 Draft Access Undertaking (DAU). Aurizon Network owns the rail network in the Goonyella coal system that connects to DBCT and provides rail access services to coal producers for coal exports through DBCT. As a key coal supply chain participant, Aurizon Network has vested interest in ensuring an efficient level of investment in the Central Queensland Coal Region (CQCR), including the port infrastructure which is complimentary to Aurizon Network's rail infrastructure, which in combination are critical to the overall supply chain output in the Goonyella system.

Aurizon Network has confined the scope of this submission to only the weighted average cost of capital (WACC). Aurizon Network has identified that the QCA has applied a similar approach in estimating WACC for DBCT as that it used in Aurizon Network's Final Decision.

In making this submission, Aurizon Network is not seeking retrospective application of WACC parameters if the QCA modifies its approach in the DBCT Final Decision. Aurizon Network has provided a response within its response to the QCA's Consolidated Draft Decision (CDD) confirming that it would accept the WACC aspect of the decision.

Should you have any queries in relation to this submission, please do not hesitate to contact Ron Huang at networkregulation@aurizon.com.au.

Yours sincerely,

**Lana Stockman**
**Vice President Regulation**

## Introduction

In making this submission, Aurizon Network has focused on the weighted average cost of capital (WACC). Aurizon Network observes that the Queensland Competition Authority (QCA) has applied nearly the identical approach in estimating WACC for Dalrymple Bay Coal Terminal (DBCT) 2015 Draft Access Undertaking (DAU) Draft Decision as that it used in Aurizon Network 2014 DAU Final Decision.

Aurizon Network has indicated in its own response submission to the QCA's Consolidated Draft Decision (CDD) that it would accept the WACC aspect of the decision, despite our disagreement with some of the WACC parameter estimations.

Specifically, this submission focuses on

- DBCT customers' contract profile with Aurizon Network; and
- the long-term demand uncertainty for Queensland coal; and
- the estimation of Market Risk Premium (MRP); and
- the estimation of imputation credit (Gamma).

## DBCT Customers' Contract Profile with Aurizon Network

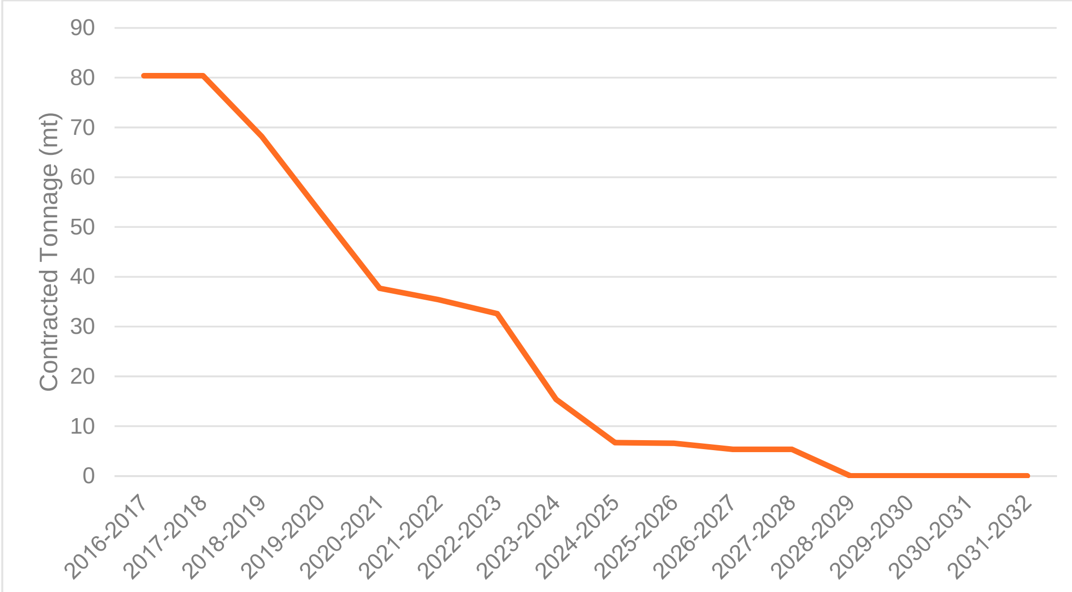
When commenting on the DBCT's contract profile, the QCA's consultant, Incenta Economic Consulting (Incenta) has stated

> Although DBCT has fewer customers, and a less diverse mix of customers than regulated energy or water businesses, all of its contracted capacity is based on take-or-pay contracts. While the average term of these contracts is lower than those of Aurizon Network and other similar export coal ports, and a material proportion are due to expire during the coming regulatory period, the users are likely not to have a viable alternative other than to export through DBCT, and a portion of this capacity **is already subject to 10 to 15 year take-or pay contracts with Aurizon Network for railing to DBCT.**[1]

Incenta's comments relating to DBCT customers' Take or Pay contracts with Aurizon Network is incorrect. Aurizon Network has examined the contract profile for all contracts with DBCT as the final destination. The weighted average (by volume) remaining contract duration as at 1 July 2016 is 5.3 years, compared to 10 to 15 years claimed by Incenta. Aurizon Network has also provided a graphical summary of contract profile in this submission (Figure 1).

[1] Incenta Consulting, 2016, DBCT: Review of WACC parameters, p. 44.

**Figure 1. DBCT Customers' Contract Profile with Aurizon Network (as at 1 July 2016)**




Aurizon Network notices the contract profile is similar to the profiles submitted by DBCT.[2] This similarity is expected as producers have a strong incentive to match the term of rail and port contracts.

In addition to Incenta's misaligned contract profile assumptions, Aurizon Network has observed a general trend that customers are requesting shorter term access contracts (i.e. less than 5 years). In a recent example, one Aurizon Network's customer chose to extend below rail access right for only 12 months through the transfer of access rights instead of signing up a new contract. Another customer has extended existing below rail access rights by 3 years to align with their contract with DBCT. The current position of Access Holders signing up to shorter term access agreements highlights demand uncertainty for Queensland coal resources. This is in direct contrast to Incenta's belief that long-term demand certainty leads to low asset beta for both DBCT and Aurizon Network.

## Long-term Demand Uncertainty for Queensland Coal

The QCA in the DBCT Draft Decision has allowed the same asset beta of 0.45 as in Aurizon Network's Final Decision. The low asset beta is derived with reference only to utility network businesses on the basis that they share similar revenue cap regulation. Aurizon Network continues to disagree with this approach and considers the underlying logic is flawed.

The logic behind Incenta's analysis for the DBCT beta estimation can be summarised as follows

1. Queensland's coal export industry is at the low cost end of international cost curve and therefore long-term export volumes are assured;
2. Any excess capacity will be contracted as there is always demand (if not growing demand) for Queensland coal;
3. As long as the capacity is contracted, DBCT will be able to collect revenue from providing the access service and hence recover the efficient costs including capital cost;

[2] DBCT, 2016, DBCT 2015 DAU Supplementary Submission, p. 6.

4. Therefore, all the other factors such as the industry it serves, the customer base, the demand elasticity and even the customer default do not affect the risk of DBCT

The QCA and Incenta have applied the same logic for Aurizon Network during the 2014 DAU process, drawing the conclusion that Aurizon Network's risk profile is similar to a utility network business. Aurizon Network does not agree that the long-term demand for Queensland coal is fully assured.

Although Queensland's coal export is predicted to grow moderately through to 2040 by both the International Energy Agency (IEA) and Australia's Chief Economist[3], this does not mean the long-term demand risk for Australian coal is low. There is a clear distinction between expectation and realisation. The volume forecasts by the IEA and Australia's Chief Economist are the probability weighted average of all possible outcomes, which would plausibly include a scenario with a material decline in future coal demand. The realisation of future coal demand in the next 25 years could be any of the possible outcomes which is a real source of risk for investors.

As a real-life example, neither Aurizon Network's nor the QCA's forecast volumes have ever precisely matched the realised volumes exactly, even though the forecast time horizon is only for 4 years. Greater variability is seen when the forecast horizon is lengthened.

The risk of uncertain coal demand is not the complete deterioration, but a significant reduction in demand such that economical pricing under revenue cap regulation is no longer achievable which results in death spiral in the demand. Similar effects would occur in the supply chain including above-rail and port services, which in combination trigger higher transportation charge and accelerate the demand deterioration problem. Therefore, the risk of coal demand uncertainty on the expected investment return is not immaterial.

Demand uncertainty is also evident by recent market activities in the coal industry. As mentioned earlier, Access Seekers are requesting shorter term contracts with Aurizon Network. DBCT has also submitted that an existing user has informed DBCT that it will not be exercising its option to renew 2.7 Mtpa of contracted capacity. This capacity has been offered to other Access Seekers in DBCT's queue, but at the time of DBCT's submission, no one has taken up that available capacity.[4]

In addition to the reduced demand for capacity, mining companies such as Anglo American and Rio Tinto are selling down their coal mines while others scale back on production.[5] All these market activities suggest the demand for Queensland coal is far from certain.
Investors provide capital to long-term infrastructure based upon their long-term expectation of returns. Aurizon Network does not consider the projection of growth in Queensland coal exports by the IEA and Australia's Chief Economist eliminates the long-term demand risk associated with the inherently volatile coal industry.

### Market Risk Premium (MRP)

Aurizon Network has identified that the QCA has applied the same MRP as that determined for Aurizon Network's 2014 DAU. This is not surprising as the QCA has relied heavily on the historical average of MRPs which results in relatively stable MRP throughout time. Specifically, Siegel and Ibbotson approach are both long-term historical average, while survey evidence is

[3] Incenta Consulting, 2016, DBCT: Review of WACC parameters, p. 44.

[4] DBCT, 2016, DBCT 2015 DAU Supplementary Submission, p.5.

[5] See for example, ABC News, 2016, Queensland coal mines up for sale as Anglo American tries to reduce debt.

also very stable throughout time. The only estimate that is more aligned to prevailing market conditions is Cornell approach, which the QCA has not disclose the weighting it applies to this approach.

Aurizon Network fundamentally disagrees with the QCA's approach that combines almost long-term historical average of MRP with prevailing risk-free rate. Such approach implies nearly one-to-one relation between cost of equity and risk-free rate. However, there is no theory suggesting this would be the correct approach. In contrast, central banks could lower interest rate to stimulate economic growth resulting in lower regulatory return approved by the QCA. The QCA approach effectively assumes investors demand lower return when the economy is less stable and returns are more uncertain.

Aurizon Network also seeks to understand the weightings that QCA applies to each of the estimation approaches, and provides comments on the MRP range applied within the DBCT Draft Decision.

**Weights applied to each Estimation Approach**

In the DBCT Draft Decision, the QCA has adopted the exact same approach as that applied to Aurizon Network. Specifically, the QCA has established a MRP range and choose a point estimate within that range with little/no explanation or justification.

The QCA in the DBCT Draft Decision has stated that

> Our view is that applying our judgement to assess the strengths and weaknesses of estimates obtained from several different methods, as well as assessing other relevant information to arrive at a final estimate for the MRP, was appropriate.[6]

Aurizon Network notices that the exact wording also appeared in the QCA's CDD on Aurizon Network's 2014 DAU.[7] The QCA has also indicated that it has not used the equally weighted average approach in the CDD. However, this still does not provide enough detail to both Aurizon Network and DBCT on how it arrives the final estimate.

On the other hand, QCA's consultant, Lally, has suggested multiple times in the report that the QCA has adopted the median estimate. For example, in discussing the estimate from dividend growth model, Lally states that

> However, since this estimates is significantly in excess of the QCA's other estimates, the median estimate is not affected.[8]

The conflicting statements create confusion as to how the QCA arrives at the final estimation from the MRP range. In Aurizon Network's view, it is not enough for a regulator to list the evidence that has been considered and to then select a point estimate based on its judgement. Good regulatory practice requires some explanation of how the judgement was applied, including explanation of the relative weights applied to each piece of the evidence.

---

[6] QCA, 2016, DBCT Management's 2015 Draft Access Undertaking - Draft Decision, p. 75.

[7] QCA, 2015, Aurizon Network 2014 Draft Access Undertaking – Volume IV Maximum Allowable Revenue, p. 211.

[8] Lally, 2015, Review of submissions on the MRP and the risk-free rate, p. 25.

The lack of transparency has led Aurizon Network unable to verify the QCA's decision to maintain a MRP estimate of 6.5% in Aurizon Network's 2014 DAU Final Decision, which was unchanged from the Market Parameter Decision, despite the QCA raising the MRP estimates for two of the four approaches since then. Moreover, the QCA has stated that the correction of the risk-free rate term inconsistency and an adjustment to Cornell approach for share buybacks will not change the final estimate for MRP.

The list of changes that in the QCA's view will not change the MRP estimation during Aurizon Network's 2014 DAU process is summarised below, which include

- the survey evidence including imputation credit has increased from 6.2% to 6.8% after correction of QCA error in the Market Parameter Decision
- the Cornell approach has increased from 6.9% in Market Parameter Decision to 7.1% in Aurizon Network Final Decision
- correction for risk-free rate term inconsistency
- the adjustment to downward bias in Cornell approach from the omission of share buybacks to dividends

Similarly, without disclosing the weights applied to each of the estimation approaches and the judgement process in selecting the point estimate, stakeholders will not be able to comment on the reasonableness of the unchanged MRP of 6.5% in the DBCT Draft Decision.

Aurizon Network considers predictability and certainty as important features of the regulatory framework which moderates regulatory risk. The QCA also holds similar view.[9] As a result, the QCA should disclose more details on how it arrives the final estimate of MRP to increase transparency.

Without visibility of the weights applied to each of the estimation approaches, stakeholders cannot verify if the QCA has made decision that would have been made by a reasonable decision maker or whether it has taken account of relevant or irrelevant considerations in reaching that decision. Moreover, Aurizon Network and stakeholders will not have been afforded natural justice because they will not have been given an opportunity to understand and respond to the QCA's rationale for the decision.

**MRP Range in the DBCT Draft Decision**

In the DBCT Draft Decision, Aurizon Network notices that the QCA has applied the same MRP range of 5.0% to 7.5% as in Aurizon Network's 2014 DAU Final Decision. For Aurizon Network's 2014 DAU, the rational was to set the lower and upper bounds marginally below and above the Siegel and Cornell estimates which were 5.5% and 7.1% during Aurizon Network's averaging period.[10]

However, the QCA has erred in the DBCT Draft Decision for maintaining a MRP range of 5.0% to 7.5%. The QCA has updated the estimates from its preferred four methods to the period ending 30 October 2015. The lowest estimate is from Siegel approach which has a value of 5.4%, while the Cornell estimate has increased to 8.2% suggesting MRP has increased since

[9] See for example, QCA, 2016, Development of Aurizon Network's regulatory arrangements to apply from 1 July 2017.

[10] QCA, 2015, Aurizon Network 2014 Draft Access Undertaking – Volume IV Maximum Allowable Revenue, p. 227.

Aurizon Network's 2014 DAU averaging period.[11] Aurizon Network cannot comprehend how the MRP range is still from 5.0% to 7.5% as both the lower and upper bounds are now lower than the respective updated values. Even if we set aside the debate over the detailed issues around each of the MRP estimates, the QCA appears to have committed an error by failing to take relevant consideration into account in establishing the MRP range from the evidence available.

The QCA may argue that even if it has taken into account the increase in the Cornell estimate, the MRP estimate will not change. This is related to the weighting issues discussed earlier and the limited visibility that stakeholder have had of the process. In fact, the QCA could have chosen any point within that range and regulated entities or any other stakeholders will not be able to criticise the choice as the evaluation process is not transparent. The current approach creates unnecessary uncertainty and regulatory risk that discourages efficient investment.

## Gamma

### Distribution Rate

Aurizon Network disagrees with the use of ASX 20 annual report approach to estimate distribution rate. As submitted in Aurizon Network's response to the QCA's Draft Decision on Aurizon Network's 2014 DAU, the financial statement approach overstates the distribution rate due to the existence of foreign tax.[12] DBCT also expresses similar concerns.

The QCA has attempted to answer Aurizon Network's and DBCT's concern by arguing corporate tax paid is defined as the tax paid only to the ATO rather than the tax paid to both the Australian Taxation Office (ATO) and foreign tax authorities.[13] However, the QCA has failed to give consideration to the underlying concern on the overestimation of distribution rate from the ASX 20 firms that arises from the existence of foreign tax.

It is not contentious that a benchmark efficient entity for Aurizon Network or DBCT receives all revenues in Australia and only pays taxes to the ATO since all operations are domestic. For such a benchmark efficient entity, the maximum distribution rate for imputation credit is the dividend payout ratio, and the maximum distribution rate can only be achieved if all dividends are 100% franked.

In the Lally's ASX 20 sample, the average dividend payout ratio is 71%, and even lower if the other ASX 200 firms are taken into account.[14] If there was no foreign source of income, it is not possible for the 20 firms in Lally's sample to pay out 84% of the franking credits with a dividend payout ratio of only 71%.

If the QCA insists on a distribution rate of 84%, it should explain how such a high distribution rate can be achieved with a dividend payout ratio much lower than 84% for a benchmark efficient entity which has no foreign incomes. On the other hand, if the QCA considers the benchmark efficient entity should pay out 84% of dividends, it should provide empirical evidences to support its position, since the average dividend payout ratio observed in the market is less than 70% for the ASX 200 firms.[15]

---

[11] QCA, 2016, DBCT Management's 2015 Draft Access Undertaking - Draft Decision, pp. 73 – 74.

[12] Aurizon Network, 2014, Response to Maximum Allowable Revenue Draft Decision, p. 220.

[13] QCA, 2016, DBCT Management's 2015 Draft Access Undertaking - Draft Decision, pp. 102.

[14] Aurizon Network, 2014, Response to Maximum Allowable Revenue Draft Decision, p. 221.

[15] See for example, Antares, 2015, Paying dividends – the chase for equity yield, March 2015, p.1.

A more common way to estimate the distribution rate is using the ATO Franking Account Balance (FAB) data. The QCA has continued to reject the use of ATO statistics in estimating distribution rate due to the unexplained discrepancies between the ATO dividend data and FAB data estimates. However, ATO dividend and FAB data are two different series of data from the ATO. The suspected problem with one source of data does not automatically preclude the reliability of the other. The QCA appears to have taken irrelevant considerations into account when exercise its power.

In contrast, there is generally no disagreement regarding the reliability of FAB data. This is summarised by the Australian Competition Tribunal (Tribunal) in its recent decision. Specifically, the Tribunal states

> There is no dispute about this definition or the reliability of the ATO FAB data used to determine the distribution rate.[16]

As a result, Aurizon Network considers a distribution rate of 0.7 using the ATO FAB data is the best estimate.

**Utilisation Rate (Theta)**

In February 2016, the Tribunal has issued decision regarding the New South Wales (NSW) and Australian Capital Territory (ACT) electricity distributors' legal appeal against the Australian Energy Regulator (AER). As part of the decision, the Tribunal has required the AER to remake its decision regarding gamma with reference to a gamma of 0.25. Aurizon Network notices that the Tribunal decision regarding gamma is consistent with its previous decision.[17]

However, in response to the latest Tribunal decision, the QCA concluded again that it is not relevant to its decision on DBCT for gamma. The QCA has made a similar statement in Aurizon Network's 2014 DAU Final Decision. Specifically, the QCA has stated

> We have considered the Tribunal's decision in relation to gamma and found there is nothing in the Tribunal's reasoning that demonstrates that our approach to estimating gamma is inappropriate. In particular, we note that the Tribunal's reasoning was based on a 'market value' definition of the utilisation rate, and reliance on dividend drop-off studies for estimating the utilisation rate in that context.
>
> On the other hand, as outlined above, our definition of the utilisation rate is the value-weighted average over the utilisation rates of imputation credits of all investors in the market, where several different estimators are used to estimate the weighted average utilisation rate.[18]

Essentially, the QCA has rejected the applicability of the Tribunal decision on the basis that the Tribunal has defined the theta (or utilisation rate by the QCA) to be the market value, whereas the QCA has considered it to be the weighted average of utilisation rate. However, this is precisely what the NSW and ACT electricity distributors are appealing, and the Tribunal has ruled in favour of the regulated entities.

---

[16] Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1, p. 273.

[17] Application by Energex Limited (Gamma) [No 5][2011] ACompT 9, May 2011.

[18] QCA, 2016, DBCT Management's 2015 Draft Access Undertaking - Draft Decision, pp. 73 – 74.

The Tribunal has stated

> The reduction in the cost of income tax represented by gamma reflects the personal taxation benefits (as opposed to other benefits such as dividends) gained by shareholders from holding equity in the network service provider and the value of those benefits as ascribed by shareholders. Consequently, it is necessary to consider both the eligibility of investors to redeem imputation credits and the extent to which investors determine the worth of imputation credits to them.[19]

And again

> Of course, it also follows from the above, that the Tribunal does not accept the AER's approach that imputation credits are valued at their claimable amount or face value (as it said in the Final Decisions: the measure is what can be claimed). The value is not what can be claimed or utilised, but what is claimed or utilised as demonstrated by the behaviour of the shareholder recipients of the imputation credits.[20]

Clearly, the Tribunal has ruled again in favour of the market value interpretation of theta. Aurizon Network submits that the QCA should address the Tribunal's decision and explain why it still adopts an approach that has been continuously rejected by the Tribunal.

[19] Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1, p. 280.
[20] Applications by Public Interest Advocacy Centre Ltd and Ausgrid [2016] ACompT 1, p. 284.