20 September 2018

Charles Millsteed
Chief Executive Officer
Queensland Competition Authority
Level 27, 145 Ann Street
Brisbane, Queensland 4000

Dear Mr Millsteed

RE: 2017 Draft Access Undertaking – Revision to the Nominated Averaging Period

Purpose of this letter

The purpose of this letter is to provide updated information which demonstrates that the averaging period of 20 business days ending 30 June 2017 (the **June 2017 averaging period**) is not appropriate for use in calculating allowable revenue as part of the access undertaking to apply to Aurizon Network during the period 1 July 2017 to 30 June 2021 (**UT5**). This information is new information that was not able to be provided previously and is relevant in the context of making a UT5 Final Decision.

In this letter, Aurizon Network also requests that the Queensland Competition Authority (**QCA**) provide reasons for its decision that it is not inclined to support revising the averaging period from the June 2017 averaging period to a period that is as close as practicable to the making of the decision required by section 134(2) of the *Queensland Competition Authority Act 1997* (**QCA Act**) (**Final Decision**).

Consistent with the matters set out in Aurizon Network's letter to the QCA of 8 May 2018, Aurizon Network maintains that an averaging period of 20 business days ending on a date proximate to the making of the final decision should be used for UT5. [redacted] previously proposed by Aurizon Network.[1] Aurizon Network therefore propose that [redacted] pending resolution of the current judicial review proceedings be used in setting the averaging period for UT5. The updated information set out in this letter supports Aurizon Network's position that an averaging period that is proximate to the date of the making of the final decision should be used. Aurizon

[1] Aurizon Network notes that it proposed its [redacted] period as appropriate unless it became clear that the Final Decision was likely to occur more than 30 days beyond that nominated period. That is now clear.

T 0429 310 983 | michael.riches@aurizon.com.au | aurizon.com.au
Level 4, 900 Ann Street, Fortitude Valley QLD 4006 Australia | GPO Box 456 Brisbane QLD 4001 Australia
Aurizon Network Pty Ltd ACN 132 181 116

Network consider the information contained in this letter to be relevant to the QCA making its Final Decision and, as such, should be taken into account by the QCA in making that decision.

Communication without prejudice to judicial review proceedings

This communication is without prejudice to the judicial review proceedings filed by Aurizon Network on 30 April 2018 and is provided to the QCA against the possibility that the QCA does not restart the decision-making process for UT5 under a new Chair or a Court does not make the orders sought in the application. This letter should therefore be read in the context of those proceedings and Aurizon Network's letter to the QCA in connection with the judicial review proceedings dated 1 May 2018. Aurizon Network notes the decision of the QCA, as set out in its letter of 31 August 2018, to delay making the Final Decision until after the Court has determined the outcome of the judicial review proceedings.

May 2018 letter: proposed revision to the averaging period

On 8 May 2018 Aurizon Network proposed to revise the averaging period to be used for UT5 from the June 2017 averaging period to the period comprising [redacted] unless it became clear that the Final Decision was likely to occur more than 30 days beyond that nominated period. The QCA subsequently requested stakeholder comments on Aurizon Network's proposal via a stakeholder notice on 26 June 2018 (**Stakeholder Notice**). Submissions to the Stakeholder Notice were published on the QCA website on 6 August 2018.

On 30 July 2018, Aurizon Network received correspondence from the QCA indicating it had considered our request and was not inclined to support revising the averaging period. This correspondence further indicated:

> *"The QCA has not reached its finalised view on this matter, as this will occur as part of the making of the final decision and an overall assessment of Aurizon Network's 2017 DAU."*[2]

No further justification or reasoning for this decision was provided by the QCA despite its claims that it will:

> *"keep regulated entities and other stakeholders informed about the direction of its thinking on important regulatory matters and be open and responsive to stakeholder views on such matters."*[3]

The averaging period plays a critical role in the setting of key rate of return and inflation parameters for the UT5 period. In not supporting Aurizon Network's proposal, and by providing a draft decision after the conclusion of the initially proposed averaging period and substantially after the commencement of the regulatory term, the QCA has not afforded Aurizon Network the opportunity to appropriately assess and manage potential financial risks (including inflation risk) over the UT5 regulatory term.

Aurizon Network requests that the QCA provide reasons for its position that it is not inclined to support revising the averaging period. Aurizon Network considers that the QCA is required to provide reasons in order to comply with the natural justice obligations in section 173(1)(d) of the QCA Act. Aurizon Network does not understand the basis for the QCA's position that it is not

---

[2] Queensland Competition Authority. Letter to Aurizon Network (Michael Riches). RE: 2017 Draft Access Undertaking – revision to the proposed averaging period. 30 July 2018.

[3] Queensland Competition Authority. Performance Framework for Queensland Competition Authority. 2 May 2018, KPI 4.6.

inclined to support a revision to the averaging period and therefore Aurizon Network is unable to respond to the QCA's position. Aurizon Network must be provided with an opportunity to respond to the QCA's position on the averaging period issue prior to the Final Decision.

Timeline in relation to setting the averaging period

On 13 February 2017 Aurizon Network nominated the June 2017 averaging period for the determination of market parameters associated with estimating the cost of capital and inflation for the UT5 regulatory term. The QCA responded on 10 March 2017 indicating that it was:

> *"favourably disposed towards the 20 business days ending 30 June 2017 to be used as the averaging period for determining the time sensitive parameters for Aurizon Network's 2017 DAU."*[4]

Aurizon Network in Section 5.5.6 of its response to the QCA's December 2017 UT5 Draft Decision (**Draft Decision**) indicated that, in light of how the QCA's decision-making process was unfolding and the implications of this for Aurizon Network, it would revise the averaging period to apply to UT5.[5] The response to the Draft Decision noted:

> *"it was reasonably anticipated by Aurizon Network at the time of nominating the averaging period that the Final Decision would be finalised reasonably close to the commencement date of the UT5 regulatory period"*[6]

and

> *"Aurizon Network will propose an averaging period closer to the Final Decision."*[7]

Table 36 of Aurizon Network's response to the Draft Decision also noted:

> *"Aurizon Network has incorporated in the 2017 DAU a proposal that the averaging period for the risk-free rate estimate be reset in the month prior to the QCA's final decision on UT5."*[8]

Aurizon Network's letter dated 8 May 2018 to the QCA was therefore consistent with our stated intention and response to the Draft Decision. In this same letter, Aurizon Network also noted that if it becomes evident to the QCA that the Final Decision is likely to occur more than 30 days beyond the nominated market averaging period [redacted] then it requests that the QCA:

- notify Aurizon Network at least 20 days prior to the commencement of that period; and
- allow for further revision of the averaging period to account for the revised expectations for issuing a Final Decision.

[redacted] ***nominated revision to the averaging period***

---

[4] Queensland Competition Authority, letter to Aurizon Network (Alex Kummant) RE: Averaging period for Aurizon Network's 2017 draft access undertaking, 10 March 2017.

[5] Aurizon Network, 2017 Draft Access Undertaking Response to the Queensland Competition Authority's Draft Decision, 12 March 2018.

[6] Ibid.

[7] Ibid.

[8] Ibid.

Given the revised timing for issuance of a UT5 Final Decision and consistent with our letter dated 8 May 2018, Aurizon Network maintains that an averaging period of 20 business days ending on a date proximate to the date of the final decision should be used for UT5. Specifically, Aurizon Network propose that [redacted] ending resolution of the current judicial review proceedings be used in setting the averaging period for UT5. Aurizon Network refers the QCA to its previous submissions on this issue as outlined above, noting that all the arguments supporting revising the averaging period made in these submissions remain valid and are consistent with good regulatory practice and precedent. These arguments may be summarised as follows:

- Aurizon Network's financial and risk management practices were compromised as the assumptions and market parameters relevant to these practices were not yet specified through release of a Draft (or Final) Decision prior to the QCA's now preferred averaging period;

- In the absence of a Final Decision (or Draft Decision in the case of the UT5 assessment) prior to the commencement of the regulatory period, best practice would require the averaging period set to reflect all relevant information available at the time when the Final Decision is made unless there is some reason to consider that such a period is not likely to be reflective of the conditions that will be experienced over the regulatory period; and

- Where a final decision is to be made after the commencement of the relevant regulatory term, there is significant regulatory precedent which supports the appropriateness of an averaging period after the commencement of the regulatory term and closer to the making of a draft or final decision.[9]

Further, the revised period is:

- consistent with the agreed amendments to the statutory timeframes for the making of a final decision on UT5;

- sufficiently in advance of the notification period to expose Aurizon Network to both favourable and unfavourable movements in market parameters (that is, to be unbiased); and

- as set out below, likely to be more reflective of market conditions that have been, and are likely to be, experienced over the UT5 regulatory term and therefore promotes the object of the QCA Act and is appropriate having regard to the factors set out in section 138, including the legitimate interests of Aurizon Network and access seekers and the pricing principles in section 168A, most relevantly, that the price of access should generate expected revenue for the service that is at least enough to meet the efficient costs of providing access and include a return on investment commensurate with the regulatory and commercial risks involved.

---

[9] Aurizon Network refer the QCA to its submission on 10 July 2018 in response to the QCA's Stakeholder Notice on 26 June 2018 seeking stakeholder comments on proposed revisions to the averaging period. This submission sets out various regulatory decisions where, for whatever reason, a regulator has not made a final decision prior to the commencement of the relevant regulatory period, it is often the case that the averaging period is selected to be a period prior to the date of the final decision, as opposed to a period prior to the commencement of the regulatory period.

Aurizon Network maintains that there are strong economic arguments and regulatory precedents that would support the QCA amending the averaging period.

The averaging period, and the rate of return and inflation estimates more broadly, are typically set with a view to reflecting the market conditions that are likely to prevail over the relevant regulatory term (see, for example, *Application by EnergyAustralia* [2009] ACompT 8, [114]–[115]). In connection with the UT5 regulatory term, it is now possible to assess the appropriateness of a 30 June 2017 averaging period relative to the [redacted] that commenced on 1 July 2017. Based on the prevailing market outcomes through this period it is clear the 30 June 2017 averaging period is a poor indicator of the market conditions that have been experienced since the conclusion of that averaging period and is unlikely to be reflective of the conditions that are likely to be experienced over the remainder of the regulatory period. This is evident in:

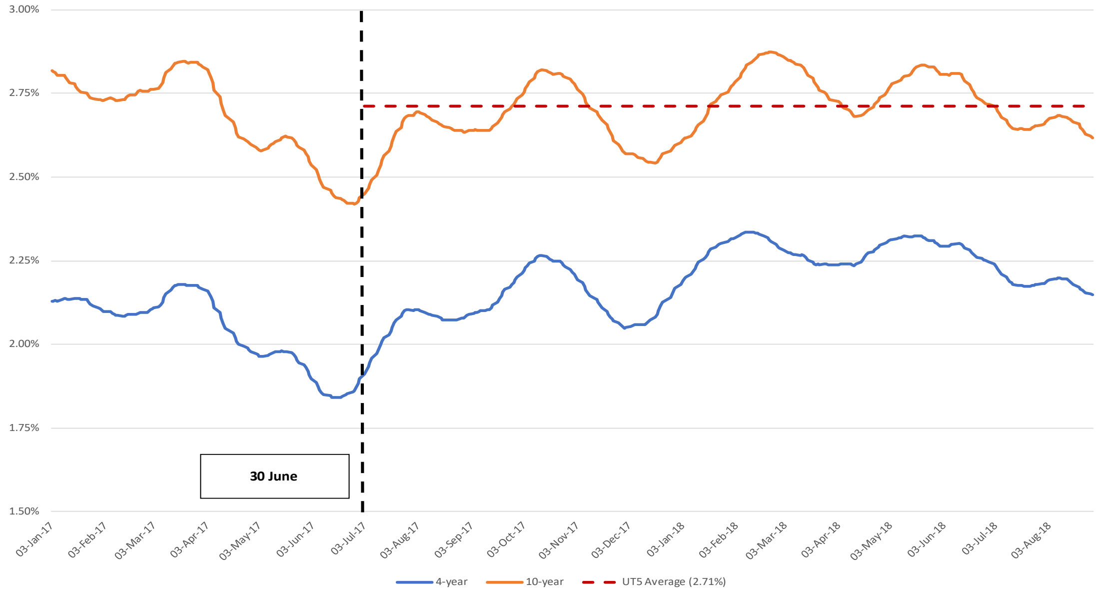
- increases in the nominal risk-free rate as measured via Commonwealth Government Securities (**CGS**); and
- fluctuation in break-even inflation and inflation swap rates.

Each of these areas is expanded upon further below.

Increases in nominal risk-free rates

In Section 5.5.6 of our response to the Draft Decision Aurizon Network highlighted that an averaging period ending 30 June 2017 coincides with suppressed risk-free rates (see Figure 19 of Aurizon Networks response) relative to more recent actual market outcomes. Since this time, nominal risk-free rates as shown in Figure 1 have steadily increased from those used at the time of the averaging period.

Figure 1. Effective 4-year and 10-year Risk Free Rates (20-day trailing average)



Source: Aurizon Network analysis of Reserve Bank of Australia – Table F16 Indicative Mid Rates of Australian Government Securities

The average risk-free rates in the 20 days ending 30 June 2017 are lower than, and generally materially lower than, the average for all subsequent 20-day periods that actually applied during UT5. They are also lower than almost all 20-day periods in the preceding 6 months.

Hedging inflation risk

Efficient management of inflation risk requires the use of an averaging period that is proximate to the making of the Final Decision, and, at a minimum, an averaging period that is after the draft decision, particularly where regulatory debate around various approaches results in uncertainty as to what approach may be adopted.

In order for Aurizon Network to know how, if at all, to transact in financial markets to manage inflation risk, Aurizon Network must know what inflation risk it is likely to be exposed to over the regulatory period. In order to know this, Aurizon Network must understand the QCA's likely position on how inflation will be used in the regulatory regime. At the time of the June 2017 averaging period, there was a broader regulatory debate occurring on both how inflation should be measured and its role in regulatory regimes more generally.

In its original UT5 submission, Aurizon Network had proposed a change in approach both as to the measurement of inflation (the break-even approach) and its application in the regulatory regime (a forecast-forecast approach, which targets a nominal rate of return). At the time of the June 2017 averaging period Aurizon Network did not know how the QCA would approach the measurement of inflation. Aurizon Network also did not know, and in fact still does not know, how the QCA proposes to approach the role of inflation–that is, whether it should be applied to target a real rate of return or a nominal rate of return.

In the Draft Decision, the QCA indicated that it was "minded to approve" a forecast-forecast approach (whereby forecast inflation is used to both adjust reference tariffs and roll forward the regulatory asset base). Adoption of a forecast-forecast approach would be a significant change from past regulatory practice and a material change to the nature of the inflation risks that Aurizon Network would face. This is because it alters the regulatory regime from one that targets a real return on assets to one that targets a nominal return on assets.[10]

Clearly, for any given preferred exposure to inflation risk, Aurizon Network's optimal inflation hedging strategy under these regimes will be very different. In fact, should Aurizon Network wish to hedge in order that its cash-flows are consistent with having a nominal cost of debt (consistent with the bulk of Aurizon Network's debt issuance) and a real return to equity holders then Aurizon Network would enter into the exact opposite inflation swap contracts under the two regimes. In particular:

- under the QCA's previous forecast-actual approach Aurizon Network would enter into a pay floating/receive fixed inflation swap; but

- under the forecast-forecast approach, which the Draft Decision was minded to accept, Aurizon Network would enter into a receive floating/pay fixed inflation swap.

---

[10] QCA Draft Decision, p. 59 in relation to the Forecast-Forecast approach. "By using forecast inflation for reference tariffs and indexation of the RAB, with no correction for actual inflation outcomes, **this method locks in the nominal rate of return** as set at the start of the regulatory period. At the commencement of the subsequent regulatory period, a new inflation forecast (and therefore WACC) would apply and the historical RAB would be rolled forward using the previous period's inflation forecast."

QCA Draft Decision, p. 60 in relation to the Forecast-Actual approach. "**This method maintains an approximate real rate of return**, as it resets the RAB at the actual rate of inflation for the subsequent regulatory period. This approach has been approved by the QCA in recent regulatory decisions, including Aurizon Network's 2016 Undertaking. An advantage is that the RAB is maintained at a value commensurate with the actual inflation rate that occurred over the previous regulatory period. A disadvantage of this approach is that it creates a perceived mismatch between the inflation rates applied to the revenue deduction and the RAB roll-forward."

The adoption of an averaging period prior to Aurizon Network understanding how the QCA is likely to approach the issue of inflation in the regulatory framework materially raises the risks to Aurizon Network of any financial hedging.

In the absence of the QCA signalling how it proposes to deal with inflation prior to the averaging period occurring, Aurizon Network is only able to seek to manage risks around inflation where the averaging period is at least proximate to time the Final Decision is made. It is simply not possible for Aurizon Network to manage, or efficiently manage, its inflation risk where inflation is measured by reference to a period some 14 months prior to the Final Decision.

Hedging cash-flow risk due to variation in WACC parameters

Another important source of risk results from variations in cash-flow as a result of variations in both risk-free rates, risk premiums and inflation forecasts. Aurizon Network can manage these risks by trading in financial derivatives. However, in order to do so, it must come to a view on the correlation between the QCA estimates of these parameters.

By way of illustration, the risk-free rate tends to be strongly negatively correlated with the Market Risk Premium (**MRP**) when the latter is measured based on prevailing market data or using the "Wright" method. However, the correlation between prevailing risk-free rates and the "Ibbotson" estimate of MRP is effectively zero (given the latter is a long term historical average).

Aurizon Network cannot know how sensitive to risk free rates the QCA's allowed return on equity will be until it has guidance on what weight the QCA is likely to give to each of these different measures for estimating the MRP. The more weight that the QCA is likely to give to the "Ibbotson" method the more strongly correlated will Aurizon Network's cash-flows be with the risk-free rate in the relevant averaging period, and therefore, the more compelling will be the case for managing this risk by, for example, entering into interest rate derivatives. The less weight that the QCA is likely to give to the "Ibbotson" method the opposite is true.

This again illustrates that, in order to *manage* risks that it is exposed to, Aurizon Network needs have an *understanding of* the risks that it is exposed to. Absent a Final Decision, Aurizon Network cannot make a well-informed assessment of the risks that it is exposed to.

Fluctuations in inflation estimates

The considerable lag between the June 2017 averaging period and the provision of a Final Decision, which will resolve how inflation will be treated in the regulatory framework and what market instruments will be used to estimate inflation, hinders Aurizon Network's ability to efficiently manage inflation risk should it choose to do so. This is further exacerbated given the lack of guidance on the proposed amendments to the treatment of inflation under UT5. As the market forecast of inflation cannot be decoupled from the market forecast of the risk-free rate, these time sensitive parameters can only be estimated as close as practical to the Final Decision. These parameters have materially changed from those based on the June 2017 averaging period.

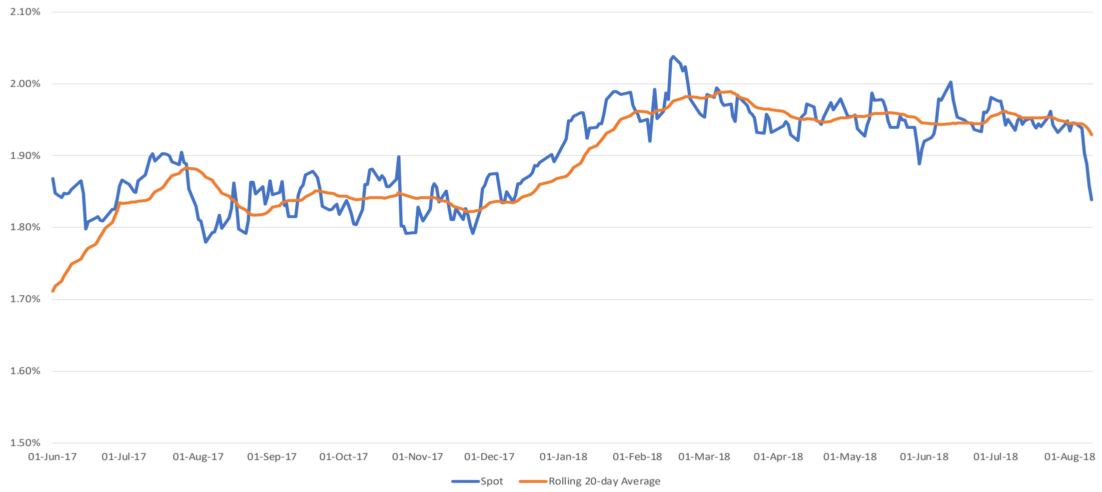
Figure 2. Spot and Rolling 20-day average 4-year inflation swaps (June 2017 to August 2018)

Source: Bloomberg

For example, Figure 2 above highlights an increase in 4-year inflation swap rates over the period June 2017 to August 2018. During this time spot inflation swap rates have increased from 1.93% under the June 2017 averaging period to 2.08% for the 20 business days ending 10 August 2018.

Alternatively, spot 4-year break-even inflation estimates have fluctuated between 1.78% and 2.04% as shown in Figure 3 below. While as [redacted] rolling 20-day average 4-year break-even inflation estimates have increased to 1.93% from 1.83% as per the June 2017 averaging period. In the absence of guidance from the QCA in the form of a Final Decision or otherwise, such fluctuation in inflation cannot be prudently and efficiently managed.

Figure 3. Spot and Rolling 20-day average 4-year break-even inflation rates (June 2017 to August 2018)



Source: RBA Statistics

Debt Risk Premium

Aurizon Network estimate the BBB+ Debt Risk Premium (DRP) to be 1.86% for the averaging period of 20 business days ending [redacted] This estimate accounts for changes in corporate bond sample, for example, inclusion of new bonds issued since June 2017 and exclusion of those bonds that have matured or will mature within one year since this time.

Aurizon Network has estimated the DRP using a pooled sample or BBB and BBB+ rated corporate bonds only. This approach differs from previous methodologies adopted by Incenta Economic Consulting (Incenta) in the Draft Decision and Competition Economist Group (CEG) in Aurizon Network's subsequent response to the Draft Decision. This follows statistical testing of a) A- rated and BBB+ rated bonds and b) BBB rated and BBB+ rated bonds. This testing concluded there to be statistically significant differences in A- rated observations but not in BBB observations – resulting in the pooling of BBB and BBB+ rated bonds only.

Additional data

To assist the QCA with its assessment, Aurizon Network has compiled the following data referenced herein into the workbook titled 'Yields and Inflation Swap Rates 290818':

- Reserve Bank of Australia – Table F16 Indicative Mid Rates of Australian Government Securities;
- Bloomberg – 4-year inflation swap rates; and
- Bloomberg – Corporate bond yields used in estimation of the revised DRP.

Should you have any queries in relation to this submission, please do not hesitate to contact Jon Windle on jon.windle@aurizon.com.au.

Yours sincerely

Michael Riches
Group Executive Network