Stephen Wisenthal
Program Manager
Queensland Competition Authority
Level 27, 145 Ann Street
Brisbane QLD 4000

Aurizon Network submission on the Queensland Rail 2025 Draft Access Undertaking

2 February 2024

Dear Stephen,

Aurizon Network Pty Ltd (**Aurizon Network**) welcomes the opportunity to provide a submission in response to Queensland Rail's (**QR**) 2025 Draft Access Undertaking (**2025 DAU**).

Aurizon Network is a subsidiary of Aurizon Holdings Limited and operates Australia's largest rail supply chain for export coal; the Central Queensland Coal Network (**CQCN**). While Aurizon Network is not a direct Access Seeker or Access Holder as defined by the 2025 DAU, it considers itself as an interested stakeholder and it is well placed to understand:

- the regulatory framework pertaining to Queensland Rail, as administered by the Queensland Competition Authority (**QCA**);
- the commercial drivers and risk exposure of a Queensland rail infrastructure provider; and
- the importance of transparency throughout the regulatory process to promote effective and informed engagement; noting the benefits that can accrue to all stakeholders as a result.

Aurizon Network is of the view that the 2025 DAU generally does not provide an adequate level of transparency to allow stakeholders to effectively engage in the regulatory process. Consequently, Aurizon Network's submission (provided as Attachment A) is focused on a select number of matters and principles for the QCA to consider.

In addition, Aurizon Network remains unsupportive of the application of a trailing average cost of debt without transition and has reservations as to its application in the context of a benchmark efficient entity. However, specifically in relation to West Moreton tariffs, where the trailing average cost of debt arrangements are assessed:

- from the perspective of the broader Queensland Rail financing arrangements as a Government-Owned-Corporation; or
- the use of the trailing average cost of debt arrangements is supported by both Queensland Rail and its customers,

then the application of a trailing average cost of debt without transition could be considered efficient. Notwithstanding, stakeholders would benefit from increased transparency as to how the trailing average cost of debt will be practically implemented over the AU3 and subsequent regulatory terms.

Aurizon Network confirms that this submission does not contain confidential information and is in a form suitable for publication should the QCA choose to do so. Should you have any questions or require further information, please do not hesitate to contact Michael Bray at Michael.Bray@aurizon.com.au

Kind regards,

Jon Windle
Manager - Regulation

Attachment A: Aurizon Network submission on Queensland Rail's 2025 DAU

1. Transparency of Information

Effective consultation and transparency of information is an important 'best practice' principle for regulation. The Office of Best Practice Regulation states[1] that:

- *"Regulatory development that is informed by consultation and stakeholder evidence is more likely to identify options that will deliver the greatest net benefit to the community";* and
- *"Consultation is a key driver of regulatory quality. Public consultation increases the chance of identifying unintended outcomes and reduces the risk of legislation serving narrow interests."*

Aurizon Network makes the following observations in relation to the transparency of information provided in the 2025 DAU.

1.1 Stakeholder consultation and engagement

The QCA's Statement of Regulatory Intent (**SORI**)[2] acknowledges that *"effective stakeholder engagement promotes a more informed decision-making process and better regulatory outcomes."*

While section 1.2 of Queensland Rail's explanatory document[3] provided in support of the 2025 DAU (**Explanatory Document**) states that Queensland Rail has adopted a 'collaborative approach' to the 2025 DAU and consulted with customers, it does not provide any further information that would help the reader to better understand the quality of the consultation and the extent of engagement with stakeholders.

Aurizon Network considers (and consistent with recent developments in best practice regulation) it would have been useful for Queensland Rail to have provided additional information within its 2025 DAU submission to address matters such as:

- the nature and scope of the engagement with various stakeholders;
- the extent to which stakeholders were given the opportunity to inform and influence the various policy and revenue proposals outlined within the 2025 DAU;
- whether stakeholders requested policy changes that Queensland Rail has elected not to include within the 2025 DAU (and the reasons why); and
- the extent to which stakeholders support the various policy and revenue proposals outlined within the 2025 DAU.

In circumstances where:

- Queensland Rail constructively engaged with stakeholders (as opposed to simply advocating for pre-determined positions); and

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[1] Queensland Treasury, Office of Best Practice Regulation, Guidance Note Best Practice Regulation, Available at: https://s3.treasury.qld.gov.au/files/Guidance-Note-Best-practice-consultation.pdf, Accessed 13 December 2023.

[2] QCA (2023), Statement of Regulatory Intent, Queensland Rail 2025 DAU, November 2023, pg.1.

[3] Queensland Rail (2023), Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, pg. 3.

- the amendments to the 2025 DAU reflect the outcomes of that engagement,

then the provision of the information outlined above would help to demonstrate the extent to which customers understand and are accepting of the proposed amendments.

Aurizon Network would welcome the QCA's view on the principles that would constitute effective stakeholder engagement. Aurizon Network requests that the QCA include commentary and guidance on these principles as part of their draft decision on the 2025 DAU. Such principles could inform future regulatory processes, including those relating to other regulated entities.

1.2 Transparency of Revenue Building Blocks

Aurizon Network considers that stakeholders would benefit from greater transparency in relation to the key inputs and parameters used to determine the Allowable Revenues proposed by Queensland Rail for the term of the 2025 DAU.

While the Explanatory Document provided in support of the 2025 DAU provides a high-level overview of the Allowable Revenue inputs, the lack of detailed information and substantive redactions to key information ultimately means that stakeholders cannot effectively engage or comment on the appropriateness of these inputs.

As a result, Aurizon Network has provided comments of a general nature below.

1.2.1 Volume Assumptions

In developing its Allowable Revenue proposal, Queensland Rail appears to have relied on volume forecast assumptions that materially exceed the actual volumes railed in the prior financial year, i.e. an annual forecast of between 8.2 to 9.6 million tonnes[4], against actual railings of 2.2 million tonnes for FY2023.

Aurizon Network acknowledges the difficulty of establishing accurate volume forecasts so far in advance of each year. Nevertheless, Aurizon Network understands that the volume forecasts assumed by Queensland Rail have directly impacted the Allowable Revenue inputs (and hence, the Access Charges) proposed for the 2025 DAU.

Due to the redactions within section 2.4.1 of Queensland Rail's Explanatory Document, Aurizon Network is unable to assess the reasonableness of Queensland Rail's proposed forecasts and cannot ascertain the proportion of contracted capacity that these forecasts represent.

Subject to complying with Queensland Rail's confidentiality obligations, Aurizon Network suggests that Stakeholders would benefit from greater transparency, including deidentified volume information and details of historical contract utilisation.

1.2.2 Capital and Maintenance Expenditure

The annual capital and maintenance expenditure forecasts proposed by Queensland Rail for the term of the 2025 DAU are significantly higher than the amounts approved for the current regulatory period.

[4] Queensland Rail (2023), Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, Table 1, pg. 4.

Once again, the more detailed information included within the Explanatory Document (and supporting attachments) is heavily redacted and does not provide an indication of the scope quantities that are intended to be delivered through the respective capital and maintenance programs. Consequently, Aurizon Network considers that the information made available by Queensland Rail does not permit Stakeholders to make informed decisions on the reasonableness of the proposed expenditure.

Queensland Rail states that the proposed increase in the proposed capital and maintenance budgets is required to facilitate the record tonnage forecast of 9.6 million tonnes. Queensland Rail proposes to introduce a review process within the 2025 DAU, which would allow for a reset of the capital and maintenance program in circumstances where the full forecast does not eventuate.[5] The proposed review process is outlined within clause 3.2 of Queensland Rail's Access Undertaking 3, noting that as currently drafted, a review of Reference Tariffs would trigger where "…the annual aggregate contracted coal tonnages…will be below 7.5 million tonnes…"[6]

The process through which Queensland Rail identified 7.5 million tonnes as being the appropriate trigger is unclear. Noting that this value remains higher than the historical coal volumes railed in the West Moreton system, Aurizon Network requests that the QCA consider whether the review trigger is set at the appropriate level.

While Queensland Rail's Access Undertaking provides for an ex-post adjustment that will reconcile the allowable revenue difference between its forecast and actual capital expenditure, a similar reconciliation mechanism does not exist for maintenance expenditure. This could see Queensland Rail under or over-compensated for its efficient maintenance expenditure where actual volumes and maintenance costs vary from the approved regulatory forecasts.

Importantly, as the West Moreton System has not operated at the projected volume levels, Aurizon Network expects there will be no history on how the assets will perform at those utilisation levels. Consequently, Aurizon Network expects there to be a lower level of confidence in the forecast asset expenditure requirements.

From the information included within the Explanatory Document, the extent to which Queensland Rail engaged with Access Holders and Access Seekers to understand their views on how the volume uncertainty and the associated impact on capital and maintenance expenditure is unknown.

Noting the uncertainty that exists in relation to both the timing and extent of the volume increase in the West Moreton System, it would seem appropriate for an annual review process to be included within the 2025 DAU. Such a process would help to promote efficient investment decisions by providing opportunities for Queensland Rail to:

- engage with customers to better understand volume expectations in advance of each year; and
- review the required level of asset expenditure (maintenance and capital) having regard to those volume expectations.

[5] Queensland Rail (2023), Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, pg. 30.

[6] Queensland Rail (2023), Draft Access Undertaking 3, 23 November 2023, pg. 107. Accessed 27 December 2023, Available at: http://www.qca.org.au/wp-content/uploads/2023/11/queensland-rail-2025-dau_mark-up.pdf

1.2.3 Operational Expenditure

Queensland Rail's Explanatory Document states that its operating expenditure proposal is 89% higher per annum (in real terms)[7] than the allowances included in its current Access Undertaking (**AU2**). Queensland Rail cites coal volume increases and an under-estimation of the AU2 operating expenditure allowances as the key drivers of the increase.

Queensland Rail has adopted a 'mixed' approach to establishing its proposed operating expenditure allowances, including:

- a bottom-up methodology for establishing the allowance for train control;
- a carry-over approach for costs deemed directly attributable to the West Moreton System;
- an allocator approach for all other management and infrastructure administration expenses, Corporate Overhead; and
- provision for a return on buildings, plant, software and inventory.

While Queensland Rail has (with the exception of Train Control) based its operating expenditure proposal on its actual costs from FY2022, the Explanatory Document does not:

- provide supporting evidence to demonstrate that Queensland Rail's actual costs represent the efficient costs of providing Access to End Users in the West Moreton System;
- provide substantive commentary or explanation for the proposed increases in the Network Business and Corporate Overhead components of the operating expenditure allowance. To the extent that these increases are driven by the proposed increase in volume forecast, consideration should be given towards whether the relevant cost drivers are directly proportional to volume; and
- provide commentary to support the inclusion of a return on buildings, plant, software and inventory.

Stakeholders would also benefit from greater transparency in relation to any operating cost efficiencies that Queensland Rail has allowed for when setting its allowances for the term of the 2025 DAU. Aurizon Network notes that the actual operating costs have materially exceeded the regulatory allowances over the AU2 period, as shown in Table 19 of the Explanatory Document.

Aurizon Network considers it will be difficult for stakeholders and the QCA to scrutinise the efficiency of the proposed cost base, and the reasonableness of the proposed increases to that cost base. Where costs are the subject of an allocation, Aurizon Network considers that Queensland Rail should also have regard to the extent to which the base-year costs represent the actual costs incurred in providing Access to the West Moreton system.

1.2.4 Tax Payable

Despite mentioning that the building block methodology includes 'Gamma Adjusted Tax Payable', the Explanatory Document does not provide any commentary or transparency in relation to the tax allowance included in Queensland Rail's Allowable Revenues.

[7] Queensland Rail (2023), Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, pg. 48.

Aurizon Network considers that Queensland Rail should provide additional information to clarify how it has calculated the tax allowance, including the impact of the top down WACC adjustment discussed below.

2. Weighted Average Cost of Capital (WACC)

2.1 Top Down WACC Adjustment

In determining the appropriate WACC for the West Moreton System in the Queensland Rail 2020 Draft Access Undertaking, the QCA adjusted the debt risk premium to account for the potential short term volume uncertainty faced by West Moreton Coal. In doing so, the QCA noted:

> *One way to determine an uplift to the applicable debt risk premium for West Moreton coal is by looking at observed bond yields for corporate entities that are considered to bear a greater level of risk than a typical BBB-rated business (our assessment of West Moreton coal's credit rating under a high level of contracted tonnes yielded a BBB rating).*

This assessment evaluated the additional debt risk premium between the benchmark BBB rated corporate bonds and a BB credit rating as this '*would be consistent with a downgrade of both West Moreton coal's financial risk profile and its business risk profile by one notch'.*

The QCA determined an additional premium of 160 basis points with reference to US corporate bond data.

Queensland Rail has proposed to retain the additional risk premium in the 2025 DAU and has estimated that premium to be 150 basis points stating:

> *HoustonKemp has calculated the margin of difference between US BBB and BB corporate stocks to find a debt risk premium adjustment of 1.5 percentage points, which converts to a top-down WACC adjustment of 0.6 percentage points.*

In converting the debt risk premium adjustment to an equivalent top-down WACC adjustment, Queensland Rail has relied on commentary in the QCA's 2021 Rate of Return Review and state:

> *However, the QCA's new preferred methodology states that it will now consider if the broader WACC estimate is reasonable given risks faced by the firm, and where the QCA does not think the WACC is reasonable, the QCA will make a top-down adjustment.*

While Queensland Rail has converted the 150 basis points into a contribution to the overall WACC (60 basis points = 150 basis points x 40% gearing), Aurizon Network considers these two values may not be equivalent on a post-tax basis. As an adjustment to the cost of debt, the uplift would have been incorporated into a debt interest cost in the tax expenses (i.e. the uplift would have been tax neutral in the building blocks). From the note in Table 9 on page 21 of the Explanatory Document, it would appear the top-down adjustment has been applied as a bottom-up adjustment to the cost of debt as per AU2.

If Queensland Rail has given effect to the top down WACC adjustment by adding 150 basis points to the cost of debt, this may not be consistent with the QCA preferred approach to making that adjustment. For example, the QCA's Final Decision on Aurizon Network's 2017 Draft Access Undertaking applied a 25-basis point increase in the overall WACC from 5.45% to 5.70% but applied the adjustment to both debt and equity and specified the individual cost of debt (4.42%) and cost of equity (7.26%) in respect of the final WACC value of 5.70%. However, the circumstances for this adjustment differ from those in AU2 where the 25-basis points adjustment was intended to increase both the cost of debt and equity to be more consistent with the use of a 10-year risk free rate.

Stakeholders would benefit from greater transparency on how Queensland Rail should apply the 60-basis point WACC uplift to both the cost of debt and equity in the derivation of the revenue building blocks.

2.2 Application of the Benchmark Efficient Entity

Aurizon Network acknowledges the 2025DAU has been submitted to the QCA as a voluntary DAU. Consequently, Queensland Rail may adopt or propose positions that may be inconsistent, or incompatible with regulatory arrangements applicable to other privately owned infrastructure providers.

As the Queensland Rail declared services are provided by a functionally separated business unit within a Government Owned Corporation, the financing of investment in the West Moreton System is not subject to a discrete debt borrowing arrangement. Financing is undertaken at the consolidated group level through Queensland Treasury Corporation (**QTC**) and is subject to competitive neutrality fees on Queensland Rail's cost of debt to:

> *neutralise any cost of funds advantage by way of government ownership on the basis of GOCs' ability to borrow funds at a lower rate than private sector competitors, given the government's credit strength[8].*

In addition, the regulatory assets comprising the West Moreton Region represents approximately 6.4% of the total Queensland Rail below rail assets and 4.2% of total below rail revenue (inclusive of transport services contract revenue)[9].

Given the relatively small proportion of the coal access revenue within the Queensland Rail consolidated group, then Queensland Rail is not expected to be subject to, and QTC would not be expected to calculate competitive neutrality fees inclusive of, risk premiums associated with financing coal export infrastructure. Aurizon Network therefore considers it important that when assessing Queensland Rail's proposed WACC, it is clearly identified as to whether the WACC is being assessed based on the broader Queensland Rail below rail activities or as a stand-alone benchmark entity supplying rail transportation services in the West Moreton. Where it is being assessed as a stand-alone entity. then the approach to the cost of debt should be reflective of the benchmark efficient entity and reflect the expected borrowing costs of coal exposed infrastructure provider.

This distinction is also important in the consideration of whether appropriate transitional arrangements for implementation of trailing average cost of debt should be assessed for the benchmark efficient entity and whether the cost of debt is consistent with the expected financing costs of a stand-alone coal rail network owner/operator.

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[8] Queensland Government (2023) Budget Strategy and Outlook 2023–24: Public Non-Financial Corporations Sector, p. 168. https://budget.qld.gov.au/files/Budget_2023-24_BP2_Public_non-financial_corporations_sector.pdf

[9] Queensland Rail (2022) Below Rail Financial Statements for the Year Ended 30 June 2022. https://www.queenslandrail.com.au/business/acccess/Compliance%20and%20reporting/2021-22%20Below%20Rail%20Financial%20Statements.pdf#search=below%20financial%20statement

2.3 Determining the Efficient Cost of Debt

In determining the proposed WACC, Queensland Rail has indicated it has applied the guidance provided by the QCA in its 2021 Rate of Return Review and is supported by an expert report prepared by Houston Kemp[10].

Aurizon Network has identified some concern with both the methodologies in the 2021 Rate of Return Review and whether its application by Queensland Rail is consistent with a benchmark efficient entity.

2.3.1 Cessation of Publication of Non-Financial Corporate Bond Spreads

The 2021 Rate of Return Review obtains cost of debt data solely from the Reserve Bank of Australia's series F3: Aggregate Measures of Australian Corporate Bond Spreads and Yields. The choice of this data source is explained as:

> *In general, we do not consider it appropriate to use proprietary data sources or in-house models, in the interests of relying on data sources that are publicly available, robust, transparent and replicable.*

On 14 November 2023, the Reserve Bank announced, citing for commercial reasons, that it would cease publication of the spreads to swaps that are necessary to estimate the nominal yield for the BBB and A-rated 10-year corporate bond using the QCA's methodology.

Due to the RBA ceasing publication of non-financial corporate bond spreads, this precludes ongoing implementation of the QCA's preferred approach of relying on publicly available financial data for the purpose of the obtaining a 10-year yield through linear extrapolation in accordance with clause 14 of the Australian Energy Regulator's 2018 Rate of Return Instrument.

This would appear to necessitate a review of the methodology Queensland Rail employs to estimate the cost of debt for the West Moreton region.

2.3.2 Inefficiency of Annual Averaging Process

The 2021 Rate for Return Instrument assumes a default approach to the averaging period by taking the average of the 12 monthly cost of debt estimates within a yearly period (from April to March). On balance, this default approach appears reasonable on implementation of the trailing average for historical periods without transition where a nominated averaging period is not feasible. However, it significantly exposes the regulated firm to the possibility of windfall gains and losses where it is has not uniformly and consistently raised debt over the course of a year, and there is no suggestion that an efficient firm would finance debt in that way.

As can be observed in Figure 1, depending on the month within the relevant year, there can be substantial variances between the yields prevailing within that month and the average annual yield for the year. Consequently, the average realised cost of debt may differ considerably from the average trailing cost of debt obtained from the default annual averages approach.

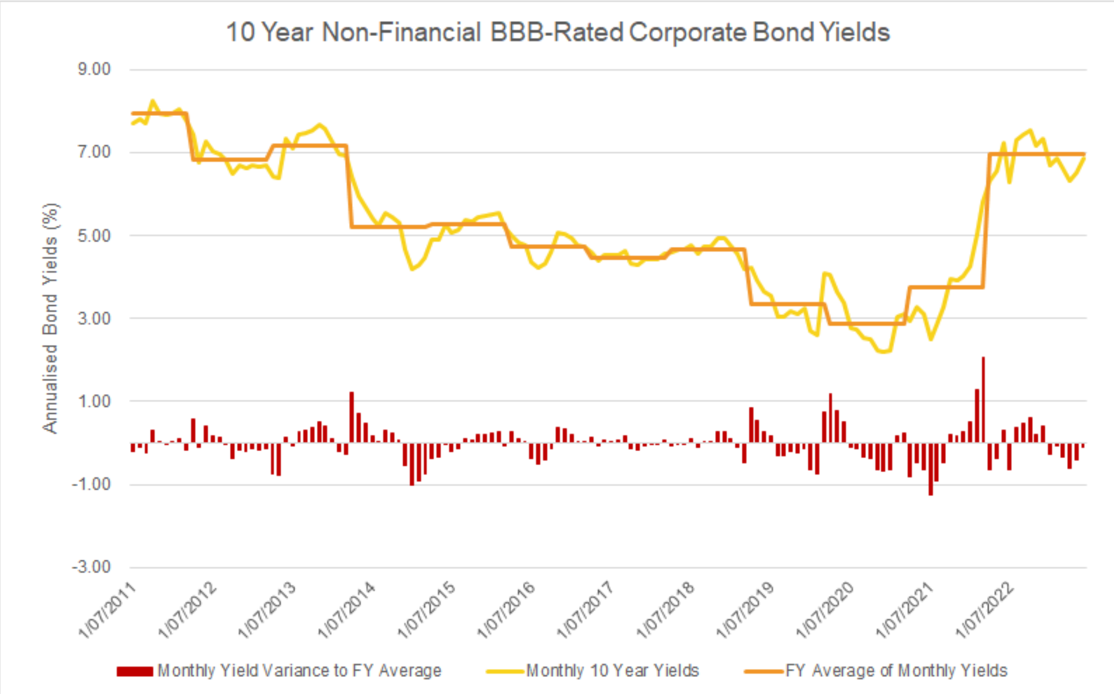
Aurizon Network notes that under the AER's Rate of Return Instrument, it is necessary for the regulated firm to nominate averaging periods. As the instrument also includes appropriate

[10] HoustonKemp (2023) Queensland Rail's Weighted Average Cost of Capital: Expert Report Prepared for Queensland Rail, August.

transition mechanisms it is not necessary to address the problem of averaging periods for historical periods in that framework.

The Explanatory Document supporting the 2025DAU does not specify whether Queensland Rail intends to nominate annual averaging periods or apply the default approach of the average of each month within the relevant year. Aurizon Network recommends that the QCA verify how the trailing average will be updated within the term of AU3.

Figure 1 Monthly Variances from Annual Average



2.3.3 Annual Update or End of Term True Up

The expert report prepared for Queensland Rail on the WACC also acknowledges the '*timing of updates to allowable revenue for the trailing average cost of debt could occur either annually or through a true-up at the beginning of the next regulatory period*'. Furthermore, the expert report indicates consideration has been given to '*the advantages and disadvantages to Queensland Rail of proposing an annually updating WACC and end of period true-up*'. However, the Explanatory Materials do not provide the outcomes of those considerations, nor do they clarify whether Queensland Rail proposes to annually update the WACC and ceiling limit or apply an end of term true-up.

If it is Queensland Rail's intention to annually update the WACC, then the 2025 DAU does not include appropriate drafting or provision to amend or update the WACC to apply a trailing average cost of debt over the proposed 5-year term of the access undertaking.

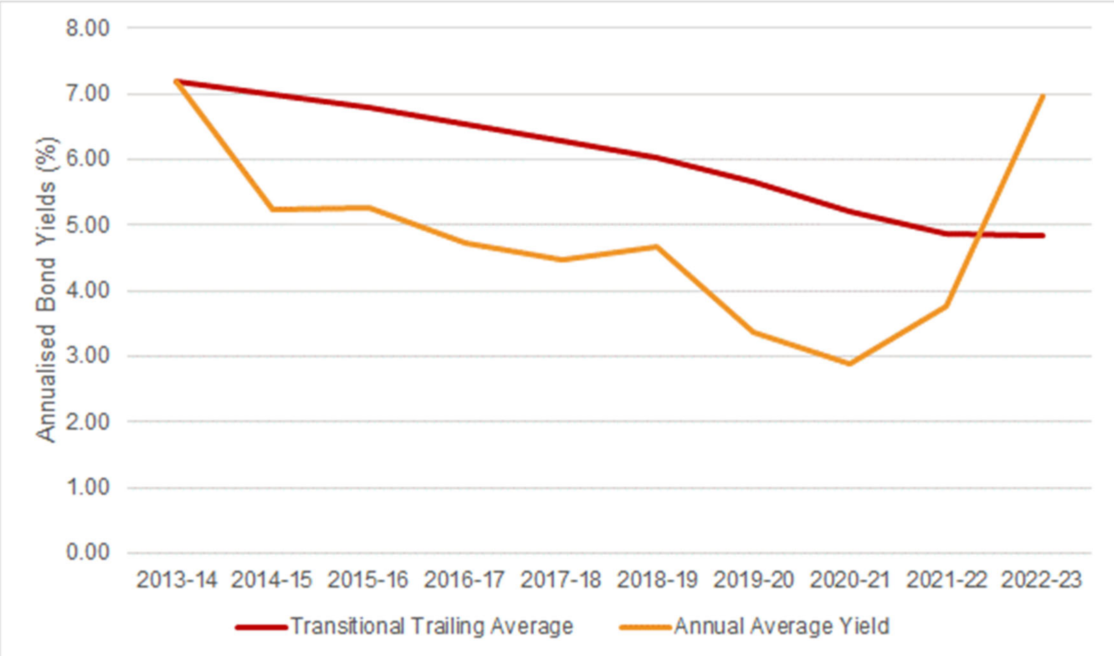
Aurizon Network also observes that the Explanatory Notes do not discuss the prospective materiality of any end of term true-up arrangement where the cost of debt remains above the trailing average at the commencement of the regulatory term.

Figure 2 shows the comparison between the trailing average cost of debt that would prevail had a firm implemented the trailing average cost of debt *with* transition as per the AER 2018 Rate of Return Instrument from FY14 and used the average 10-year cost of debt for that relevant year[11]. Consider a scenario where a regulated firm's regulatory period commenced in FY24 and they elected not to apply an annual update to the WACC. If yields are expected to remain above the trailing average at the end of FY23, then the trailing average would also be expected to increase over time. This could lead to a significant end of term adjustment which appears contradictory to the purported benefits from the trailing average approach by providing more stable prices between regulatory periods through avoiding material changes in the cost of debt which may occur from the on-the-day approach.

Consistent with the discussion above in respect of how regulatory certainty is promoted through a clear understanding by stakeholders of how the trailing average will be applied in practice, the QCA should seek to clarify whether:

- whether Queensland Rail and customers have agreed to an end-of-term adjustment;
- whether Queensland Rail and customers have agreed to an annual update process; or
- whether Queensland Rail proposes to accept the risk of any difference between the prevailing cost of debt over the term of AU3 and the trailing average.

Figure 2 Comparison of Average Annual 10 Year Yield and Trailing Average with Transition



2.3.4 Simple versus Weighted Average Trailing Cost of Debt

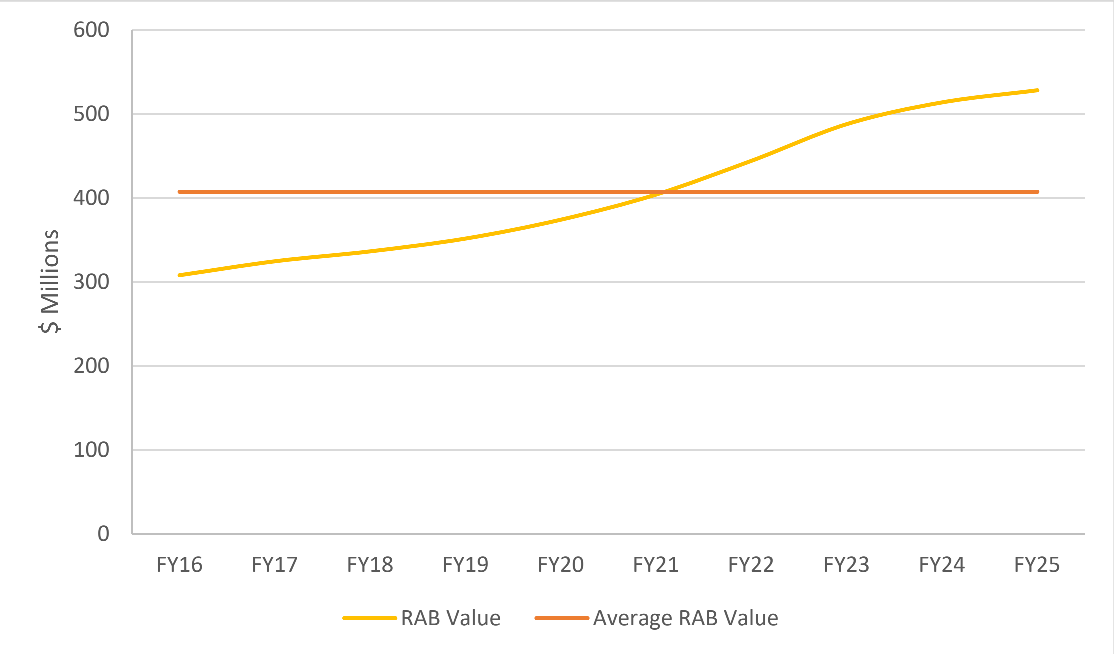
The appropriateness of the application of a simple trailing average to the benchmark efficient firm relies on relative constancy of the regulated asset base and therefore the level of debt being financed. This is necessary to ensure that the benchmark trailing average cost of debt aligns with the financing requirements at the assumed gearing level. As noted by QTC, '*a simple trailing average is a reasonable approach if new capital expenditures are relatively small compared to the existing regulated asset base*'. Where this not the case, then a weighted trailing average should apply for the reasons discussed by the AER:

[11] These figures differ from those in Table 14 of the AER's Rate of Return Annual Update 2023 where the averaging period is August each year as opposed the average over the whole year. URL: https://www.aer.gov.au/system/files/2023-11/AER%20-%20Rate%20of%20Return%20annual%20update%20-%20December%202023.pdf. Accessed: 19 December 2023.

Under a weighted trailing average, instead of assigning equal weights to each year of the trailing average, weights would reflect potential time variability of NSPs' RABs. This aims to reduce any mismatch between the return on debt allowance and benchmark efficient debt financing costs. This might better align with the NPV=0 condition and so may better promote an efficient outcome.

Aurizon Network has considered whether the RAB and debt profile of the West Moreton System over the last ten years is consistent with this constancy assumption. Figure 3 illustrates that the midpoint (average of opening and closing RAB values) in the West Moreton System has grown over the AU1 and AU2 period with increasing levels of capital expenditure. This suggests that a trailing average (commencing from FY16 and apply equal weighting in the trailing average) would result in the regulatory cost of debt that does not align the actual borrowing costs associated with the capital expenditure profile.

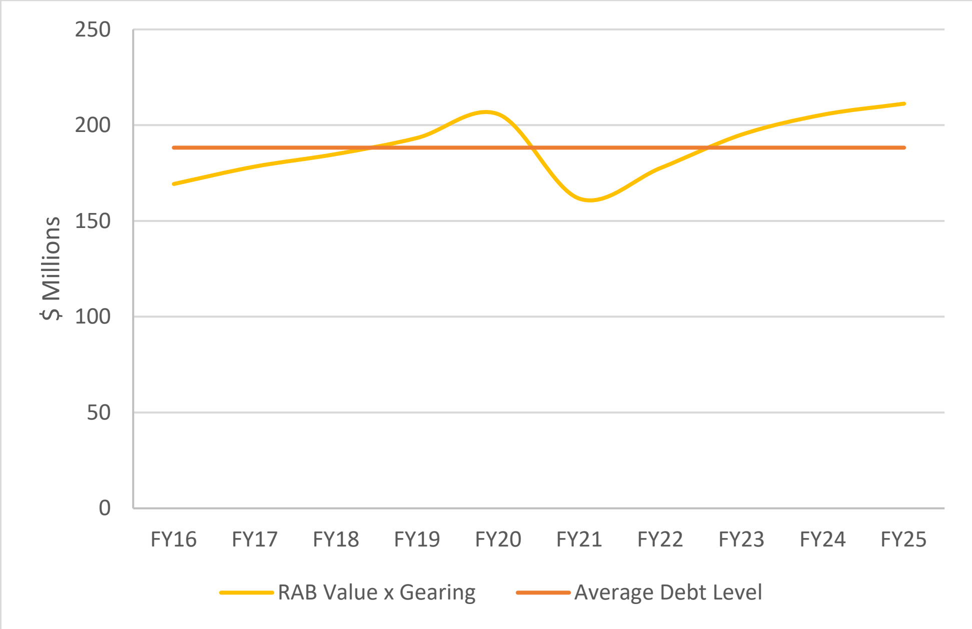
Figure 3 West Moreton System RAB Values over AU1 and AU2



Source: Aurizon Network analysis

However, as the regulatory gearing levels for AU1 (55%) and AU2 (40%) are not the same, the amount of debt assumed in the building blocks model over the AU1 and AU2 period has remained relatively constant as shown in Figure 4. This indicates that for the 10-year period covering the AU1 and AU2 periods, it would have been reasonable to apply a simple trailing average cost of debt with transitional implementation from FY16.

Figure 4 West Moreton System RAB Regulatory Debt Levels



Source: Aurizon Network analysis

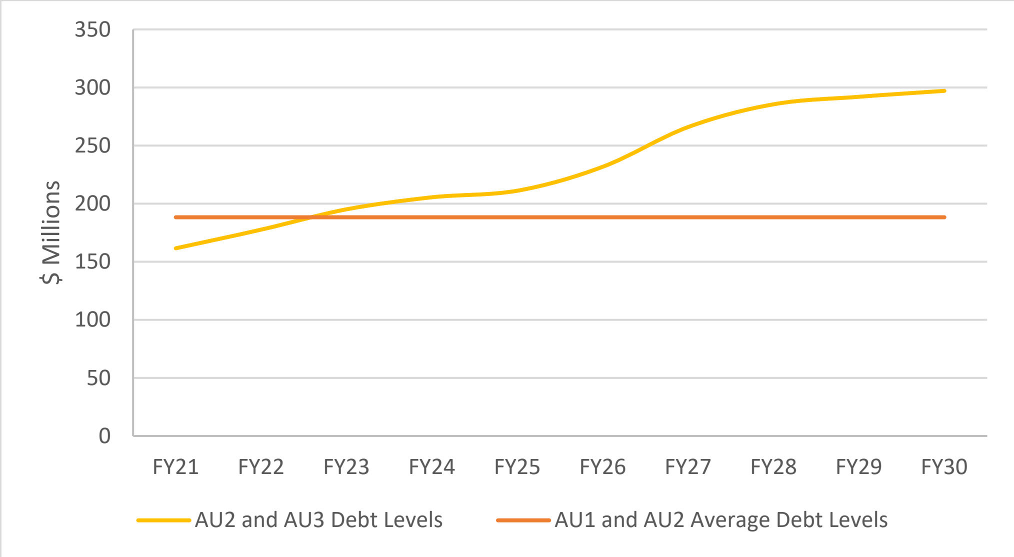
Notwithstanding the observed constancy of debt levels over the current and prior regulatory periods, this is unlikely to continue to be the case given the proposed capital expenditure amounts over the AU3 period. The implications for the choice between a simple and weighted average trailing average were tested by the AER who concluded:

> *We compared outcomes under the simple and weighted trailing average across a range of scenarios. Under these scenarios, the difference over the next 5 years in return on debt between the 2 approaches was only pronounced when both large increases in the regulatory asset base (RAB) and prevailing interest rates occurred.*

As observed in Figure 2 above, there has been a large increase in prevailing interest rates. In addition, the proposed capital expenditure of $362 million over the AU3 period would require a proportionally large increase in the AU2 debt levels. Consequently, there may be a pronounced difference between a simple and weighted trailing average. This point was also acknowledged by the QTC in its submission to QCA's 2021 Rate of Return Review:

> *When the RAB is increasing a weighted trailing average will produce a better cost of debt estimate than a simple trailing average.*

Figure 5 Projected Growth in Western Moreton Regulatory Debt Levels.



Source: Aurizon Network analysis

To evaluate the potential differences between a simple and weighted trailing average, Aurizon Network has used the annual monthly average 10-year yields from the RBA F3 series for the period from FY16 to FY23 and included placeholder yields for the period of FY24 to FY30. These values have been input into the QTC's weighted trailing average cost of debt model with the proposed West Moreton RAB midpoints over the period of FY16 to FY30. As shown in the model extract below, due to the combination of the increase in prevailing rates and the proposed increases in the RAB in the early part of AU3, there is a material difference between the simple and weighted trailing average cost of debt outcomes.

Weighted trailing average cost of debt model with annual updates

	Jun 21	Jun 22	Jun 23	Jun 24	Jun 25	Jun 26	Jun 27	Jun 28	Jun 29	Jun 30
Regulated asset base (M)	$404.0	$444.2	$487.9	$513.8	$528.1	$579.6	$665.2	$714.0	$730.2	$742.9
Benchmark gearing	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Benchmark debt balance (M)	$161.6	$177.7	$195.1	$205.5	$211.2	$231.8	$266.1	$285.6	$292.1	$297.1
Δ benchmark debt balance (M)	-$44.1	$16.1	$17.5	$10.4	$5.7	$20.6	$34.3	$19.5	$6.5	$5.1
Weighting to new debt	-27.3%	9.0%	9.0%	5.0%	2.7%	8.9%	12.9%	6.8%	2.2%	1.7%
Weighting to existing debt	127.3%	91.0%	91.0%	95.0%	97.3%	91.1%	87.1%	93.2%	97.8%	98.3%
10-year benchmark debt yield	2.87%	3.75%	6.95%	6.95%	6.95%	6.50%	6.50%	6.50%	6.00%	6.00%
Estimated cost of debt	4.98%	4.98%	4.98%	4.98%	4.98%	5.58%	5.58%	5.58%	5.58%	5.58%
Annually updated cost of debt	4.98%	4.69%	5.03%	5.25%	5.42%	5.58%	5.80%	5.95%	5.99%	6.11%
Annual revenue adjustment (M)	*$0.00*	*-$0.51*	*$0.09*	*$0.56*	*$0.93*	*$0.00*	*$0.57*	*$1.04*	*$1.19*	*$1.58*

Adjusted benchmark debt yields

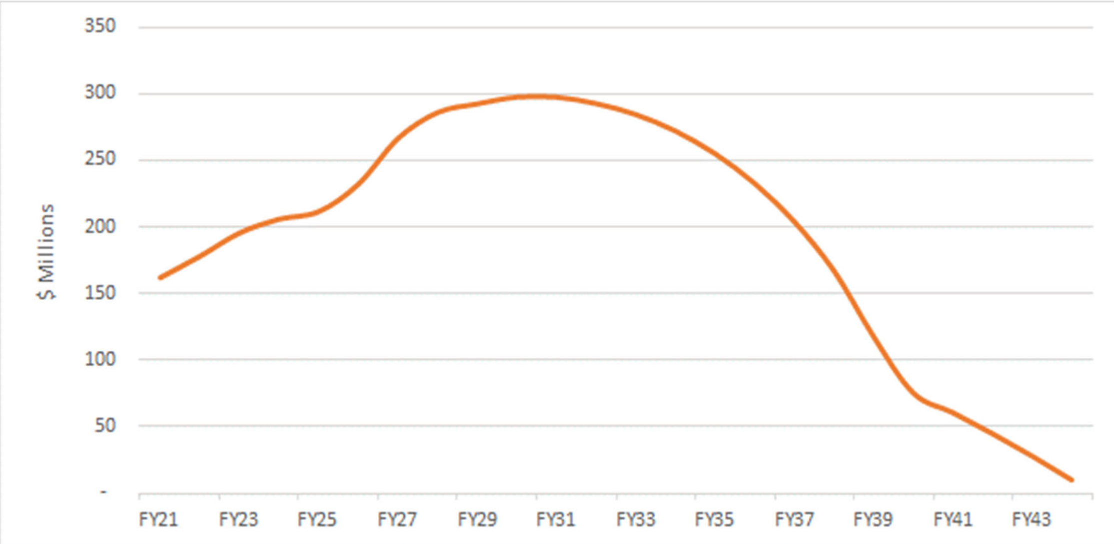
	Jun 21	Jun 22	Jun 23	Jun 24	Jun 25	Jun 26	Jun 27	Jun 28	Jun 29	Jun 30
	5.68%	5.50%	5.63%	5.70%	5.73%	5.41%	5.39%	5.59%	4.73%	4.41%
	5.68%	5.50%	5.63%	5.70%	5.30%	5.22%	5.52%	4.70%	4.38%	4.89%
	5.68%	5.50%	5.63%	5.25%	5.10%	5.38%	4.57%	4.34%	4.87%	6.80%
	5.68%	5.50%	5.16%	5.04%	5.27%	4.28%	4.19%	4.84%	6.81%	6.80%
	5.68%	4.99%	4.94%	5.22%	4.06%	3.84%	4.72%	6.83%	6.81%	6.80%
	5.11%	4.75%	5.13%	3.98%	3.59%	4.46%	6.86%	6.83%	6.81%	6.48%
	4.84%	4.95%	3.82%	3.49%	4.26%	6.91%	6.86%	6.83%	6.49%	6.48%
	5.07%	3.52%	3.31%	4.18%	6.95%	6.91%	6.86%	6.50%	6.49%	6.48%
	3.49%	2.95%	4.04%	6.95%	6.95%	6.91%	6.50%	6.50%	6.49%	6.00%
	2.87%	**3.75%**	**6.95%**	**6.95%**	**6.95%**	**6.50%**	**6.50%**	**6.50%**	**6.00%**	**6.00%**
Weighted trailing average	***4.98%***	***4.69%***	***5.03%***	***5.25%***	***5.42%***	***5.58%***	***5.80%***	***5.95%***	***5.99%***	***6.11%***
Simple trailing average						***5.12%***	***5.30%***	***5.50%***	***5.63%***	***5.90%***
Variance						***0.46%***	***0.50%***	***0.45%***	***0.36%***	***0.22%***

2.3.5 Alignment to other Components of the Proposed DAAU

The 2025 DAU proposes to apply reduced economic lives of 19 years and 14 years to the existing regulatory asset base and proposed capital expenditure respectively. These terms have been calculated with reference to a weighted average mine life.

As discussed in section 2.3.4 a key underlying assumption of the simple trailing average cost of debt is relative constancy of the RAB debt levels for the benchmark efficient entity. It is likely that this assumption cannot be satisfied given the expected significant capital expenditure profile and the subsequent rates of depreciation over the next 14 to 19 years. Aurizon Network has estimated an indicative debt level profile for the West Moreton RAB based on these inputs as shown in Figure 6. This profile is also based on conservative declining capex assumptions from FY30 (by definition, no capex is assumed from FY40).

Figure 6 Indicative West Moreton RAB Debt Levels based on 40% Gearing and Economic Lives.



It is uncertain as to whether Queensland Rail and its customers have considered the implications in subsequent regulatory periods of permanently implementing a simple trailing average cost of debt. It may transpire that given the magnitude of these debt levels, customers may benefit from Queensland Rail efficiently managing this variability in debt levels using a trailing average cost of debt within its broader corporate debt management arrangements as opposed to a stand-alone benchmark efficient entity.

Notwithstanding, Aurizon Network considers the indicative West Moreton RAB and debt level profile demonstrates why a simple trailing average cost of debt is not appropriate for a benchmark regulated service subject to asset stranding risk which may be subject to changes in depreciation policy and the periodic revision of economic lives (i.e. the value of debt is not relatively stable over time as may occur with perpetual network assets). Consequently, a hybrid trailing average cost of debt (trailing average DRP with an on-the-day base rate) is more suited to the expected non-uniform RAB profile.

2.3.6 Absence of Transitional Arrangements and Financeability of Capex

The QCA 2021 Rate of Return Review concluded that *'transition arrangements are not required to implement the benchmark trailing average debt management strategy, except for exceptional circumstances'*. This is consistent with the position expressed by QTC that it:

is aware that some businesses adopted debt management strategies aligned with the trailing average approach several years ago. The starting value of the benchmark debt yields in the trailing average should be consistent with the timing of these decisions.

Consequently, the implementation of a trailing average cost of debt without transition is appropriate only in the limited circumstances where a firm has already implemented a debt management strategy consistent with the trailing average cost of debt and trailing average is equivalent to prevailing rates. This is unlikely to occur for private sector regulated firms subject to the on-the-day approach as noted by CEG:

the most efficient debt management strategy for a firm subject to the on-the-day regulatory regime is to issue long term staggered debt but to overlay this with an interest rate swap portfolio such that the base rate of interest can be reset at the same time the regulator sets the on-the-day cost of debt.

A regulated business which has adopted this efficient debt management strategy may then be exposed to the substantial risk that the implied base rate interest in the trailing average cost of debt is materially different to the prevailing risk free rate at the reset where the regulated firm cannot implement a derivative strategy on its outstanding debt portfolio to replicate the trailing average cost of debt. Consequently, implementation of the trailing average cost of debt without transitional arrangements is not in the legitimate interests of the regulated firm or under different circumstances may result in higher prices to consumers as was previously noted by the DBCT User Group:

There is no doubt that a trailing average approach applied today [24 August 2021] will result in an artificially high estimated cost of debt, compared to the present efficient cost of financing, providing a significant and inefficient windfall gain to infrastructure providers at a significant cost to customers. The DBCT User Group submits that is not consistent with the factors the QCA requires to be considered in the context of an undertaking (s 138(2) QCA Act) or in the context of an access determination (s 120 QCA Act).

As the value of the RAB is increasing over the term of AU3, then a benchmark efficient entity would also be required to raise new capital at prevailing rates which may substantially exceed the trailing average. This may have substantial implications for the financeability of those capital raisings and the impact on other credit metrics. It also potentially violates the NPV = 0 assumption as recently affirmed by the Australian Energy Regulator:

If the benchmark business has significantly increasing (or decreasing) debt balances along with large changes in prevailing interest rates, using a simple trailing average might result in a mismatch between its efficient debt financing costs and the allowed return on debt. This mismatch would generally lead to a departure from the NPV=0 condition and could lead to an inefficient outcome.[12]

There is no consideration in the Explanatory Document as to the implications of the need for additional equity injections to finance both the equity component and the servicing of the uncompensated debt component to maintain the benchmark gearing levels. To the extent that the benchmark efficient entity was required to finance capex through additional equity

[12] Australian Energy Regulator (2023), Rate of Return Instrument Explanatory Statement, February, pg. 233-234. Available at: https://www.aer.gov.au/system/files/AER%20-%20Rate%20of%20Return%20Instrument%20-%20Explanatory%20Statement%20-%2024%20February%202023_1.pdf, Accessed 30 January 2024.

injections or reduced or no dividend payouts, then this will have further consequences for the efficient cost of equity.

As previously stated, to the extent that Queensland Rail considers these equity implications are managed within the broader context of the consolidated Queensland Rail Group as opposed to a stand-alone benchmark efficient entity and customers are supportive of implementing a simple trailing average cost of debt without transition, then the proposed debt management arrangements within the voluntary Draft Access Undertaking may be considered efficient.

Notwithstanding, Aurizon Network reaffirms our preference of considering flexible arrangements in limited circumstances where applying a trailing average debt management strategy without such arrangements creates material and adverse impacts on a firm that are not related to its own inefficiency.

3. Asset Lives and Depreciation Approach

Aurizon Network is generally supportive of:

- Queensland Rail's proposal to accelerate the recovery of its invested capital through a reduction in the regulatory asset lives to match the expected economic lives; and
- the principle that cost recovery should be more closely aligned to the period in which the assets will be utilised and the immediate beneficiaries of that investment[13].

3.1.1 Demand Uncertainty and Asset Stranding

The demand for coal carrying train services is a function of both the:

- willingness of Queensland coal producers to supply coal into the seaborne coal export markets; and
- willingness of participants in that market to demand coal extracted by Queensland coal producers,

both of which are factors that may be impacted by direct or indirect policy or judicial intervention.

Queensland Rail's Explanatory Document, and the expert report prepared by Houston Kemp[14], cite the transition towards a net zero carbon emissions future as a key factor impacting future coal production and increasing uncertainty of long-term demand.

This observation is consistent with the submissions made by Aurizon Network in response to the QCA's discussion paper on climate change related expenditure. More specifically, that changes in government policy or technology create a high degree of uncertainty over future coal demand and have the potential to create demand side shocks; where the reduction in coal demand is deeper and more sudden than expected.

As outlined in Aurizon Network's submission to the QCA on climate change, a regulated business must be provided a reasonable expectation of recovering its investment in the facility providing the declared service.

In circumstances where the economic asset lives applicable to Rail Infrastructure remain materially misaligned with the remaining life of coal mines, or where coal production is expected to materially (and sustainably) decline as a result of policy or technological change, this will create an asset stranding risk for the service provider.

In circumstances where the regulatory process relies primarily on mitigating stranding risks through depreciation, the QCA should consider approving a depreciation profile which provides a sustainable price path under the conservative demand scenarios regardless of whether that scenario transpires.[15]

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[13] While the customer composition may change over time, the primary beneficiaries of sustaining capex are current users where that capex is intended to maintain reliability and capacity availability for those customers.

[14] Houston Kemp (2023), Regulatory treatment of coal related assets, 3 November 2023.

[15] Aurizon Network (2023), Aurizon Network Response to the QCA's Approach to Climate Change Related Expenditure Draft Position Paper, 23 June 2023, pg. 3. Available at: http://www.qca.org.au/wp-content/uploads/2022/10/an-sub-climate-change-draft-23-jun-2023.pdf. Accessed 29 December 2023.

The Explanatory Document includes expert analysis by HoustonKemp in respect of the projected sustainability of the price path from the reduction in the regulatory asset lives and the projected demand profile. The analysis is redacted and appears heavily reliant on the system operating at the forecast volume levels. It is also unclear as to how sensitive the recovery of the investment over the economic life of the mines will be to shortfalls in those volume levels. Aurizon Network recommends the QCA evaluate the analysis in the HoustonKemp report to:

- ensure the assumptions in the analysis are consistent with the relevant inputs used in the AU3 pricing model;
- determine the sensitivity of the results to variations in inputs and volumes; and
- assess the associated impacts on tariff affordability.

Aurizon Network is of the view that asset stranding continues to be a key risk, not only for the West Moreton System, but also for infrastructure service providers whose revenue is primarily derived from thermal coal and based on current available technologies and to a lesser extent, metallurgical coal. In forming a view on the economic asset life and depreciation methodology proposed in Queensland Rail's 2025 DAU, it is imperative that the QCA also consider how government climate change policies targeted at the coal mining industry and net zero emissions, will impact the ability for the service provider to recover its investments.

The QCA should also consider how an appropriate balance can be achieved between the initiatives that seek to address asset stranding risk and the impact of those initiatives on access pricing. Failure to do so, could adversely impact investment incentives, service quality, and potential result in an acceleration of a stranding event if access charges become unaffordable. Such consideration should be informed by engagement with stakeholders and the service provider.

Aurizon Network considers it important that the QCA, consistent with recent decisions of regulators in relation to demand uncertainty, implement appropriate proactive adjustments early in the regulatory term to acknowledge and address this Stranding risk. It may be the case that early adoption of such measures will provide for a smoother transition than a major adjustment applied at a later date. This would provide greater regulatory certainty for all stakeholders and will assist in promoting efficient investment incentives for the remaining service life of rail infrastructure.

3.1.2 Variation in proposed asset life between new and existing assets

Aurizon Network notes Queensland Rail's proposal to apply a differential economic asset life for new and existing assets; specifically:

- 14 years for new capital; and
- 19 years for existing capital.

Queensland Rail's Explanatory Document states that these lives reflect the weighted average remaining mine life for the Western Moreton System, and that the life will progressively decrease by a year, each financial year for new capital insertions.[16]

Aurizon Network has not verified the weighted average mine life analysis prepared by Queensland Rail's consultant and cannot comment on the reasonableness (or otherwise) of

[16] Queensland Rail (2023), Draft Access Undertaking 3 (DAU3) Explanatory Document, 10 November 2023, pg. 32.

the proposed estimates. Instead, Aurizon Network has provided commentary on some key principles.

The QCA may wish to consider whether it is appropriate to apply differential asset lives in this context, particularly in circumstances where new capital is not incremental (or utilised) by all End Users. In such circumstances, it may be more efficient for investments which are mine specific investments to be recovered over the expected life of that mine.

In addition, rather than apply differential lives for new and existing assets, a preferred outcome may be to adopt a single weighted average life for all assets and front load the recovery of new investments through the removal of RAB indexation. This is consistent with the approach negotiated and agreed to with customers at the Dalrymple Bay Coal Terminal where non-expansion capital expenditure (NECAP) charge will not be indexed[17] and will be recovered on a straight-line basis over the current approved economic life of the terminal. DBI has advised investors that under the new pricing arrangements revenue will also be driven by[18]:

> *Return of capex: NECAP spend is recovered on a straight-line basis to 2054.*

The removal of indexation in the Regulatory Asset Base (**RAB**) for new capital expenditure is consistent with the objective that the AU3 investments should be recovered from current users who are the primary beneficiaries of the investment and avoids the back-loading of the recovery of these investments to a declining demand base as the network approaches the end of its economic life. In the context of the West Moreton System, it would also avoid the prospect of the financial burden for AU3 investments substantially falling on the last mine standing.

For example, in the scenario where operations at the Wilkie Creek mine do not continue beyond the term of the current access agreement and New Acland reserves are depleted by 2034 then the backloading of the asset recovery through capitalisation of inflation in the RAB would shift a significant proportion the return of the AU3 investments to Cameby Downs.

The current cost accounting approach to depreciation is underpinned by an expectation of stable or growth in demand over the technical life of the assets to provide stable long-term pricing for what are effectively essential services provided in perpetuity. This is not an objective applicable to the investment in infrastructure with finite and declining demand.

Aurizon Network therefore recommends that the QCA, Queensland Rail and Customers explore alternate capital recovery profiles for new investments.

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[17] Dalrymple Bay Infrastructure (2022), ASX Announcement: DBI Announces 10 Year Pricing Agreements and Significant Increase in Distribution Guidance, 11 October.

[18] Dalrymple Bay Infrastructure (2023), ASX Announcement: 2022 Full Year Financial Results – Investor Presentation, page 32.