Queensland Rail
GPO Box 1429
Brisbane Qld 4001

T 07 3072 0781
E ceoqueenslandrail@qr.com.au
W queenslandrail.com.au

QR Ref: MCR-24-459

Professor Flavio Menezes
Chair
Queensland Competition Authority
GPO Box 2257
Brisbane Qld 4001

Dear Professor Menezes

**Queensland Rail's Draft Access Undertaking 3 (DAU3) - QCA Draft Decision**

Attached is Queensland Rail's submission in response to the QCA's Draft Decision dated 6 June 2024 on DAU3.

Queensland Rail is engaging with key stakeholders on a range of issues as outlined in the Draft Decision to identify areas of further consensus with a view to make collaborative submissions on DAU3 to the QCA later in the year.

Should your officers have any questions in relation to the attached submission they can contact Queensland Rail's Manager Policy and Regulations Mr Douglas Jasch on 0488 314 741 or by email at douglas.jasch@qr.com.au.

Yours sincerely

**Kat Stapleton**
Chief Executive Officer

23 July 2024

# Queensland Rail's Initial Response to the QCA's Draft Decision on Rail's Draft Access Undertaking 3 (DAU3)

23 July 2024

**Commercial-In-Confidence**

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# 1. QCA Consultation

Queensland Rail submitted its draft access undertaking (**DAU3**) and accompanying explanatory document to the Queensland Competition Authority (**QCA**) in November 2023.

The QCA's indicative DAU3 consultation is outlined in the below Table.

**Table 1: QCA's DAU3 indicative Consultation Process**[1]

| Date | Consultation |
|---|---|
| 23 November 2023 | QCA seeks stakeholder comments on DU3 |
| 22 February 2024 | QCA seeks comments on submissions received from stakeholders on DAU3 |
| **6 June 2024** | **QCA Seeks Comment on its DAU3 Draft Decision** |
| Future Date | QCA to seek collaborative submissions |

# 2. Queensland Rail's Approach to the Draft Decision on DAU3

## 2.1 Queensland Rail's Approach to Draft Decision

Due to the upcoming collaboration process and to meet the QCA's deadline for submissions, Queensland Rail has responded to a limited number of matters. The fact that Queensland Rail does not respond to any particular issue does not indicate agreement with the QCA's indicative approach.

## 2.2 DAU3 Stakeholder Consultation

The QCA Draft Decision (**Draft Decision**) was issued on 6 June 2024. The Draft Decision responded to reference tariff and non-reference tariff issues with indicative Draft Decisions. However, there were also a large number of matters where the QCA prefers that Queensland Rail and stakeholders work together to seek agreement. For example, The Draft Decision states:

> "*The reference tariff is part of a package of service standards, obligations, costs and risks, which reflects customers' preferences, the legitimate business interests of Queensland Rail, and other factors. Given Queensland Rail and its customers are best placed to assess their respective needs and preferences, we are keen for them to work together to find the best outcome……*
>
> *….. the access regime is based on a negotiate–arbitrate framework, which envisages that, in the first instance, access to a declared service should be procured on the basis of terms and conditions that are commercially agreed between the access seeker and the provider of the declared service."*[2]

[1] http://www.qca.org.au/project/queensland-rail/queensland-rails-2025-draft-access-undertaking/
[2] QCA Draft Decision - Queensland Rail 2025 Draft Access Undertaking, June 2024, P77 & 78.

Queensland Rail is committed to continuing to work with customers and other stakeholders through the DAU3 approval process and looks forward to seeking agreement (where possible) on the matters identified in the Draft Decision.

# 3. The West Moreton System Reference Tariff

## 3.1 Tonnage Certainty

In FY2023-24, [redacted] were hauled on the West Moreton System as shown in Table 2. Contract entitlements as of 1 July 2024 are also included in the table.

**Table 2 – 2023-24 West Moreton Coal Railings and Contract Capacity**

| Mine | Net Tonnes Coal | Contract Entitlement as of 1 July 2024 (mtpa) |
|---|---|---|
| Cameby Downs | [redacted] | |
| New Wilkie | | |
| New Acland Stage 3 | | |
| Total | | |

**Cameby Downs**

Cameby Downs mine [redacted]

**Wilkie Creek**

Wilkie Creek mine commenced railings from the Macalister Siding, west of Dalby on 12 July 2023. [redacted] On 27 December 2023, New Wilkie Energy P/L the owner/operator of the Wilkie Creek mine was placed into Administration/ Receivership. The Administrators restarted the mine briefly but services were halted between 7 January 2024 and 1 April 2024. A small number of services were operated between April and into May 2024 but there have been no services since 5 May 2024. [redacted]

New Wilkie Energy currently remains in Receivership, with the Receivers (FTI Consulting) stating that they are still in discussion with a party or parties regarding a potential sale to operate the mine. Any proposal must still be considered and accepted by creditors. The next meeting of creditors is scheduled to be convened by 2 August 2024.

[redacted]

[redacted]

**New Acland Stage 3**

New Acland Stage 3 coal mine commenced railing out of the Jondaryan siding on 16 October 2023. [redacted]

**West Moreton System Coal Railings Forecast**

At this point in time, West Moreton System coal railings forecast remains at up to 9.6mtpa for the DAU3 period assuming the Wilkie Creek mine restarts and New Acland Stage 3 is successful with the water rights appeal hearing.

However, assuming that New Wilkie mine does not restart operations and New Acland Stage 3 loses the water rights appeal and has to cease production, coal tonnages for the West Moreton System could be as low as [redacted]

During the collaboration period, Queensland Rail will consult with New Hope, Yancoal and the Receivers for New Wilkie Energy regarding West Moreton coal system railings. If there is agreement on a lower West Moreton System coal railings forecast during the DAU3 period, Queensland Rail will develop a revised DAU3 reference tariff using revised capital, maintenance and operating expenditure allowances to meet the lower tonnage level.

## 3.2 QCA proposed CPI approach

In its Draft Decision, the QCA proposes that Queensland Rail seek agreement with stakeholders on many of the building blocks of the Reference Tariff such as volumes, capital, maintenance and operational expenditure etc. However, the QCA further advised in the Draft Decision that if agreement is not reached it will simply escalate the current AU2 '*incremental*' Reference Tariff by CPI and include it in DAU3 as the Reference Tariff, escalating it by CPI each year until the tonnages increase or become more certain. Queensland Rail would be required to lodge a Draft Amending Access Undertaking (**DAAU**) at a later time if it sought a building block approach, there would be no automatic review trigger and no guarantee that the QCA would approve the building blocks approach.

When the AU2 West Moreton System Reference Tariff was developed there was uncertainty around tonnage levels, and international coal prices were low. New Acland Mine Stage 3 was not approved and New Acland Stage 2 Mine was close to running out of coal. The Wilkie Creek Mine (loading at the Macalister siding) was closed.

Due to this, the QCA determined the West Moreton System coal reference tariff on 2.1 mtpa, [redacted]

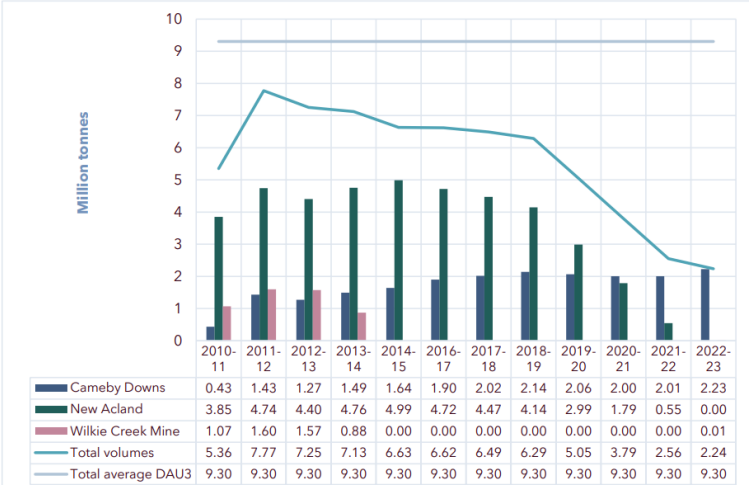
The AU2 Reference Tariff at 2.1mtpa was unaffordable for Yancoal. On the basis that there was a reasonable chance that New Acland Stage 3 Mine would gain its approvals, Queensland Rail agreed to an approach where the QCA would determine the Ceiling (Actual) Reference Tariff ($36.46/'000 gtk ($2020/21), and a lower temporary Incremental (affordable) Reference Tariff ($21.50/'000 gtk) ($2020/21). A loss capitalisation account was established which would be approved annually by the QCA and would represent the difference between the Ceiling (Actual) Reference Tariff revenue that would have been earned by Queensland Rail and the Incremental Reference Tariff revenue received. The intent was that Queensland Rail would recover the loss capitalisation account balance when coal tonnages increased during DAU2 and/or during the term of DAU3.

Queensland Rail is strongly opposed to the QCA's proposal to escalate the incremental (temporary) Reference Tariff by CPI as the DAU3 Reference Tariff. If a CPI approach were adopted, it should be based on the Actual Reference Tariff. Queensland Rail should not continue to bear the burden of the risk of further adding to the loss capitalisation account during DAU3 (a time with high coal prices), and an additional increased risk of being unable to recover the balance. Rather, Queensland Rail should be able to recover any loss capitalisation account balance during DAU3 as originally intended. Queensland Rail volunteered the AU2 approach but is not willing to continue to sustain increased loss capitalisation balances in DAU3.

The QCA says that the breakeven point for Queensland Rail under the incremental Reference Tariff approach is 4 mtpa, and that Queensland Rail would start to recover its loss capitalisation balance above that level. The Draft Decision further states that the West Moreton System has previously supported annual volumes of 7.8 million tonnes and so the network should not require upgrading. On this basis the QCA states that the escalated AU2 incremental Reference Tariff would allow Queensland Rail to recover its efficient costs.

Queensland Rail's analysis is that the breakeven point is not 4 mtpa. Further, the West Moreton System requires significant investment at lower levels of traffic than at 7.8 million tonnes of coal per annum. Further the 7.8 million tonne figure referenced by the QCA dates from 2010-11, as shown in Figure 1. System assets have aged materially since that time and some require replacement.

Figure 1 Historical volumes on the West Moreton System




| | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cameby Downs | 0.43 | 1.43 | 1.27 | 1.49 | 1.64 | 1.90 | 2.02 | 2.14 | 2.06 | 2.00 | 2.01 | 2.23 |
| New Acland | 3.85 | 4.74 | 4.40 | 4.76 | 4.99 | 4.72 | 4.47 | 4.14 | 2.99 | 1.79 | 0.55 | 0.00 |
| Wilkie Creek Mine | 1.07 | 1.60 | 1.57 | 0.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| Total volumes | 5.36 | 7.77 | 7.25 | 7.13 | 6.63 | 6.62 | 6.49 | 6.29 | 5.05 | 3.79 | 2.56 | 2.24 |
| Total average DAU3 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 | 9.30 |

*Source: Queensland Competition Authority,* Queensland Rail 2025 Draft Access Undertaking: Draft Decision, *p 97*

Further, and in any event, the AU2 Coal Reference Tariff was based upon inputs that do not apply today. [redacted] Additionally, the WACC for DAU3 is materially higher than for AU2 due to different market circumstances. There are now different capital and maintenance requirements. The QCA proposed approach does not, and may never, allow Queensland Rail to recover its efficient costs. Queensland Rail believes that the proposed approach is contrary to the QCA Act.

**Two-Part Tariff**

The AU2 Reference Tariff was based on Cameby Downs being the only operating mine on the West Moreton System. The two-part reference tariff derived for this situation results in New Acland mine paying the same path charge as Cameby Downs mine. The outcome is New Acland mine is paying a higher path charge than it otherwise would if the AU3 reference tariff is reset based on contracted tonnages. The CPI escalation methodology proposed by the QCA would mean that New Hope would continue to pay this charge during the course of AU3 until the tariff is reset.

Queensland Rail's DAU3 proposal assumes that New Hope will run during DAU3 and so the methodology is consistent with previous QCA precedent and is more equitable.

For a detailed analysis of the QCA's proposed approach refer to the HoustonKemp Economists' Expert Report in **Attachment 1**.

## 3.3 Asset optimisation

HoustonKemp Economists note in their attached Expert Report that the QCA did not put forward a draft position on asset optimisation. Instead, the QCA in their draft decision:

1. notes stakeholder submissions that the RAB should be written down due to purported inefficiency in capital expenditure;
2. notes stakeholder submissions that asset optimisation would improve affordability of reference tariffs; and
3. considers it unlikely that optimising assets would create an undesirable precedent.

With regard to point (1), HoustonKemp considers that Queensland Rail's RAB should not be written down for purported inefficient capital expenditure because:

- expenditure that is rolled into the RAB has already been assessed as efficient by the QCA through the regulatory determination and annual capital expenditure claim processes; and
- the RAB is unrelated to the capacity or value of the asset – rather, it measures capital expenditure a regulated business has not yet recovered via depreciation.

With regard to point (2), HoustonKemp considers that pricing considerations do not justify writing down the RAB since:

- affordability concerns have lessened since AU2 as coal prices have recovered and there is a realistic prospect that coal volumes could be two to four times higher than the 2.1 mtpa assumed for AU2;
- there is a risk that Queensland Rail will be subsidising coal users; and
- writing down the RAB due to affordability concerns implicitly exposes Queensland Rail to the downside risk of coal prices without any potential upside, since:

- the RAB will be written down when coal prices are low, and so affordability is a concern; and
- it is unlikely that the RAB will be revalued upwards when coal prices increase.

The impact of the aforementioned asset optimisation approach would be as follows:

- Queensland Rail will be unable to recover its efficient costs, which would be inconsistent with the objectives of the QCA Act;
- the risk, and therefore costs, of undertaking investment on the West Moreton System will materially increase; and
- there will be a disincentive against investment on the West Moreton System, thereby leading to dynamic inefficiency.

With regard to point (3), HoustonKemp continue to consider that writing down Queensland Rail's RAB will create an undesirable precedent, noting that:

- it reduces predictability and stability, which disincentivises regulated businesses such as Queensland Rail from continuing to invest in their assets, while potentially reducing their ability to raise capital at efficient rates; and
- other Australian regulators have raised concerns that writing down the RAB of a regulated business will introduce regulatory risks, including:
  - the Australian Energy Market Commission (AEMC) in relation to the electricity transmission sector;
  - the Australian Competition and Consumer Commission (ACCC) in relation to the telecommunications sector and electricity network sector; and
  - the Australian Energy Regulator (AER) in relation to gas pipelines.

Refer to HoustonKemp Economists Expert Report in **Attachment 1** for a detailed analysis regarding asset optimisation in relation the Reference Tariff RAB.

## 3.4 System Capacity

Queensland Rail notes that the QCA undertook a detailed capacity analysis of the West Moreton System for Queensland Rail's Access Undertaking 1 (**AU1**). Queensland Rail provided detailed analysis which included commentary and Master Train Plans. The QCA determined that there are 113 train paths across the Toowoomba Range. The QCA AU1 Final Decision stated:

> *"We have not accepted Queensland Rail's estimate of West Moreton network capacity of 112 weekly return train paths. Rather, we have accepted B&H's revised estimate of West Moreton network's capacity of 113 return paths per week (see Section 8.4 of this Decision). Therefore, the relevant capacity estimate is 113 paths that applies for the purposes of determining coal reference tariffs in this Decision."*[3]

Notwithstanding the above, HoustonKemp Economists have highlighted in their expert report in **Attachment 1** that any change in allocations should result in an increased allocation of costs to coal services based upon economic precedent and economic principles.

[3] QCA Decision Queensland Rail's Draft Access Undertaking, June 2016, P.143.

HoustonKemp Economists point out in their Expert Report in Attachment 1 that any change in the number of Train Paths will affect the cost allocation for common network assets. Ongoing AU2 projects which Queensland Rail agreed at the time of the approval of AU2 would be affected by any change.

Further, the study is to occur before the QCA has considered this submission where Economic Experts HoustonKemp address in detail key issues around any change in the 113 train path allocation. Refer to Attachment 1 for the HoustonKemp Economists Report addressing the allocations and the 113 Train Paths.

The QCA consultant Arcadis' report cites information from the Queensland Rail's West Moreton System Information Pack, that indicates the allowable gross tonnes on the Rosewood to Toowoomba section is only 7mpta and Toowoomba to Dalby section is only 4.5mpta. This information is clearly outdated when considering it represents gross tonnes of rollingstock and product travelling across a line section and would only represent net coal tonnages of approximately 3.8mtpa between Rosewood and Toowoomba and 2.5mtpa between Toowoomba and Dalby and will be subsequently removed from the information pack in a future update. Queensland Rail has no record of being asked by Arcadis if there was more recent information.

Arcadis state that they undertook an assessment of the train paths available in the West Moreton System as presented in Queensland Rail's Master Train Plan (MTP) available on its website. They contend that the current MTP only shows 43 [return] paths per week and conclude that this equates to approximately 4.4mtpa of train capacity. The MTP that Arcadis reviewed from the Queensland Rail website was the current MTP at the time and reflecting the contracted paths at that time.

Capacity analysis has been completed by Queensland Rail in December 2022/January 2023 with current and future West Moreton and Metropolitan system operating assumptions, including the post Cross River Rail sectorised timetable, which indicates through the development of draft Master Train Plans (MTPs) that there is available capacity for profiles up to the total Toowoomba Range coal capacity of 97 return paths per week in addition to the 16 non coal return paths (i.e. a total of 113).

The draft MTPs developed by Queensland Rail considered full coal train cycles (i.e. from depot to mine to port and back to depot) and operator preferences with respect to scheduling for crew rostering and train consist utilisation, which demonstrated available capacity and a viable operating plan. Aurizon Coal was consulted on the development on its paths in the indicative 113 path MTP.

The 113 weekly return train MTP provides capacity preservation for 14 non-coal return freight paths and 2 return passenger paths per week. Of note, in 2023-24 there was an average of only 3.1 return non-coal freight paths used per week (i.e. 0.4 for livestock and 2.7 for grain)

The Arcadis report goes on to state that none of the capital expenditure projects proposed by Queensland Rail relate to increasing the operational capacity of the West Moreton System. This is accurate, as the capital projects proposed in DAU3 by Queensland Rail relate to improving the condition of the assets (e.g. bridges and trackwork) so that 9.6mtpa of coal throughput can reliably be delivered.

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## 3.5 Ongoing consultation

Queensland Rail intends to continue to collaborate with stakeholders on the following issues (and any additional issues that arise):

| Topic | Issues |
|---|---|
| **West Moreton System coal** | System tonnages |
| | Capital Expenditure |
| | Consultation on proposed Capital Expenditure |
| | Maintenance Expenditure |
| | Operating Expenditure |
| | Risk Related Issues (i.e. accelerated depreciation, triggers to review capital expenditure, renewal rights) |
| | Loss Capitalisation |
| | Independent Capacity Assessment |
| | Private Infrastructure |
| **Scheduling/Management Principles** | Train Path Rescheduling |
| | Train Service Level Description |
| | Ad Hoc Train Services Response Times |
| | Path Resumption |
| | Publishing/notification of MTPs |
| **Standard Access Agreement – Insurance** | Limitation on Claims |
| | Liability Coverage |
| | Coverage / Deductible Levels |
| | Minimum Financial Strength |
| | Notification of Claims |
| **Standard Access Agreement - Other Issues** | Dispute Resolution Escalation |
| | Assignment rights |
| **Reporting** | Standard Performance Indicators (Schedule 5, Clause 1) |
| | Reporting of Ad Hoc possessions |

The QCA has indicated that collaborative submissions will be required by the end of September 2024. Given the extensive range of issues on which the QCA has not made a preliminary decision, the proposed timeframe is inadequate for consultation with all stakeholders, decision making, drafting of undertaking provisions and submissions, and Queensland Rail's governance processes.

Following discussions with stakeholders, Queensland Rail requests that the QCA allow collaborative submissions to be provided by mid November 2024.

## 3.6 Arcadis Report

The QCA's technical consultant, Arcadis, provided views on a number of matters.

**Attachment 2** contains Queensland Rail's response to issues raised by Arcadis.

In addition, Arcadis determined that the Reference Tariff build up should not include corporate overheads. Queensland Rail does not accept that conclusion. Queensland Rail will undertake benchmarking to support its corporate overhead allowance.

# Attachment 1: HoustonKemp Economists - Assessment of key topics raised in the QCA's Draft Decision

HOUSTONKEMP
Economists

# Assessment of key topics raised in QCA's draft decision

A report for Queensland Rail

15 July 2024

Commercial-in-Confidence

## Report authors

Martin Chow

Johnathan Wongsosaputro

Kate Mulready

Ashmit Vyas

## Contact Us

**Sydney**
Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

## Disclaimer

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# Executive summary

Queensland Rail has engaged HoustonKemp to provide economic advice on specific issues raised in the Queensland Competition Authority's (QCA) draft decision. Queensland Rail has asked us to consider:

- the appropriateness of the QCA's proposed method of escalating the existing reference tariff by consumer price index (CPI) for the West Moreton System;
- economic implications of asset optimisation, ie, a write-down of Queensland Rail's regulatory asset base (RAB); and
- the appropriate cost allocation between coal and non-coal services

We have adopted the QCA's assessment framework when making our assessments and recommendations. The following criteria are of particular relevance to our assessment for this project:

- the three dimensions of efficiency;
- the pricing principle in which prices should generate revenue for the service that is at least enough to meet efficient costs of providing access to the service; and
- provisions that protect the interests of Queensland Rail, existing access holders, and potential access seekers.

## Proposed West Moreton System reference tariff

Queensland Rail's proposed reference tariff for Queensland Rail's Draft Access Undertaking 3 (DAU3) is $32.63/000 gtk (real FY26 terms). This reference tariff is calculated on the basis of 9.6 million tonnes per annum (mtpa), and includes triggers to reset the reference tariff if demand is lower than expected.

The QCA's draft decision is to not approve the proposed reference tariff, stating that there are 'significant obstacles' to using a building block approach to estimate an efficient price. Instead, the QCA's preliminary view is:

- that Queensland Rail undertake discussions with stakeholders and endeavour to reach consensus on some key DAU3 building blocks such as volume forecasts and capital, maintenance and operating expenditure required; and
- if agreement is not reached on these building blocks, that the QCA use an alternative approach that indexes existing reference tariff (which was set to recover incremental costs) by CPI as a short-term solution, and include provisions for Queensland Rail to submit its building block-based reference tariff and related measures via a draft amending access undertaking (DAAU) if greater certainty and/or a negotiated outcome is achieved during access undertaking 3 (AU3).

The QCA's draft decision approach of escalating the AU2 West Moreton System incremental reference tariff by CPI represents a move away from its well-established approach to calculating reference tariffs, with tariffs no longer linked to the efficient cost of providing services. In our opinion, such an approach would be inconsistent with approval criteria set out in the Queensland Competition Authority Act 1997 (QCA Act) because:

- tariffs should be set with reference to efficient costs – not doing so would mean Queensland Rail either:
  - under-recovers its efficient costs, which is inconsistent with the requirement for revenue to be at least enough to cover efficient costs and contrary to the interests of Queensland Rail; or
  - over-recovers its efficient costs, which would be contrary to the interests of users;

- there is a risk that revenue collected could be below incremental costs;
- it would not be in the interests of Queensland Rail since:
  - affordability concerns have lessened since the approval of AU2 such that it is appropriate to now recover efficient costs rather than incremental costs;
  - there is a risk that Queensland Rail will be subsidising coal users; and
  - it is not clear if Queensland Rail would recover efficient costs at any level of demand; and
- it creates regulatory uncertainty, as:
  - it is unclear when and if the West Moreton reference tariff will transition back to building block approach; and
  - there is no longer a link between QCA decisions and the reference tariff.

We consider that Queensland Rail's proposed approach is appropriate and aligns with the QCA's decision for AU2 and AER's contingent project application process. Nevertheless, if the QCA considers that Queensland Rail's proposed top-down trigger is inappropriate due to the uncertainty associated with coal volumes of 9.6 mpta, then we recommend that the QCA consider adopting the following approach:

- determine baseline scenario of demand – in our opinion, this should reflect the most likely demand outcome;
- require Queensland Rail to put forward its proposed capital and maintenance program to deliver the baseline scenario of demand;
- assess prudency and efficiency of proposed capital and maintenance, taking into account submissions from stakeholders and negotiation outcomes; and
- set the West Moreton reference tariff to recover efficient costs, with clearly defined triggers in place so address demand uncertainty.

In our opinion, the approach above would better promote the approval criteria set out in the QCA Act because it:

- sets reference tariffs to recover the efficient costs of providing the service, which is consistent with QCA Act approval criteria;
- does not lead to concerns around subsidisation of coal users, which risks distorting competition in the coal market; and
- promotes allocative efficiency, since:
  - the reference tariffs will reflect the efficient cost of providing the service, thereby sending an appropriate price signal to users; and
  - it improves Queensland Rail's ability to recover efficient costs, thereby increasing its incentive to continue to provide the service.

## Asset optimisation

The QCA did not put forward a draft position on asset optimisation. Instead, the QCA in its draft decision:

1. notes stakeholder submissions that the RAB should be written down due to purported inefficiency in capital expenditure;
2. notes stakeholder submissions that asset optimisation would improve affordability of reference tariffs; and
3. considers it unlikely that optimising assets would create an undesirable precedent.

With regard to dot point (1), we consider that the Queensland Rail's RAB should not be written down for purported inefficient capital expenditure because:

- expenditure that is rolled into the RAB has already been assessed as efficient by the QCA through the regulatory determination and annual capital expenditure claim processes; and
- the RAB is unrelated to the capacity or value of the asset – rather, it measures capital expenditure a regulated business has not yet recovered via depreciation.

With regard to dot point (2), we consider that pricing considerations do not justify writing down the RAB since:

- affordability concerns have lessened since AU2 as coal prices have recovered and there is a realistic prospect that coal volumes could be two to four times higher than the 2.1 mtpa assumed for AU2;
- there is a risk that Queensland Rail will be subsidising coal users; and
- writing down the RAB due to affordability implicitly exposes Queensland Rail to the downside risk of coal prices without any potential upside, since:
  - the RAB will be written down when coal prices are low, and so affordability is a concern; and
  - it is unlikely that the RAB will be revalued upwards when coal prices increase.

The impact of the aforementioned asset optimisation approach would be as follows:

- Queensland Rail will be unable to recover its efficient costs, which would be inconsistent with the objectives of the QCA Act;
- the risk, and therefore costs, of undertaking investment on the West Moreton System will materially increase; and
- there will be a disincentive against investment on the West Moreton System, thereby leading to dynamic inefficiency.

With regard to dot point (3), we continue to consider that writing down Queensland Rail's RAB will create an undesirable precedent, noting that:

- it reduces predictability and stability, which disincentivises regulated businesses from continuing to invest in their assets, while potentially reducing their ability to raise capital at efficient rates; and
- other Australian regulators have raised concerns that writing down the RAB of a regulated business will introduce regulatory risks, including:
  - the Australian Energy Market Commission (AEMC) in relation to the electricity transmission sector;
  - the Australian Competition and Consumer Commission (ACCC) in relation to the telecommunications sector and electricity network sector; and
  - the Australian Energy Regulator (AER) in relation to gas pipelines.

## Cost allocation for common network assets

Queensland Rail's proposal for DAU3 retains the cost allocation between coal and non-coal services used in AU2. The QCA has not opposed this approach in its draft decision for DAU3. However, some coal users submit that keeping the cost allocation constant would be inconsistent with Queensland Rail's proposed increases in capital and maintenance expenditure.

The economic implications of changing the cost allocation would vary depending on whether it applies to AU2 costs, most of which have already been incurred, or AU3 costs, which have not been incurred. In our opinion, it would be inappropriate to change the cost allocation approach for AU2 costs as doing so would result in windfall gains or losses to coal users or Queensland Rail. It would also be retrospective in nature,

noting that Queensland Rail has made investments in common assets assuming that the existing cost allocation methodology will be applied.

In our opinion, there are sound economic reasons for increasing the share of AU3 costs that are allocated to coal users. These are as follows:

- costs should be allocated on a causal basis where possible – as expansionary capital expenditure is caused by coal users, it would be appropriate to allocate all of these costs to coal users;
- common costs should be recovered in the least inefficient manner – our previous analysis on coal users' ability to pay suggests that allocating a higher proportion of common costs to coal users would be consistent with Ramsey pricing principles; and
- the approach would improve Queensland Rail's ability to recover efficient costs – Queensland Rail currently under-recovers the costs that are allocated to non-coal users.

# 1. Introduction

The rail service provided by Queensland Rail on the West Moreton System is a declared service for the purposes of Queensland's third party access regime established under Part 5 of the Queensland Competition Authority (QCA) Act. Under this access regime, Queensland Rail is required to submit a draft access undertaking (DAU) for consideration and approval by the QCA.

The current access undertaking, AU2, is set to expire on 30 June 2025. Queensland Rail submitted its DAU3 to the QCA in November 2023. In its June 2024 draft decision, the QCA refused to approve Queensland Rail's proposed tariff for the West Moreton System and noted it considered that there is uncertainty around volumes and the efficient costs of providing coal train services on the West Moreton System. As a way forward, the QCA has proposed that the AU2 existing reference tariff be indexed to CPI, noting that:[1]

> It is also uncertain whether Queensland Rail's proposed volumes will be required and whether, if they are contracted, they can be delivered. We have suggested a potential way forward — that is to escalate existing tariffs by the consumer price index (CPI) — but our preference is that the parties negotiate a reference tariff that has regard to the legitimate interests of Queensland Rail's 2025 Draft Access Undertaking 2 both Queensland Rail and its customers, and promotes efficient investment in, and operation and use of, the West Moreton system.

The QCA has also invited stakeholders to submit their views on several other topics.

Queensland Rail has engaged HoustonKemp to provide economic advice on specific issues raised in the QCA draft decision. Queensland Rail has asked us to consider:

- the appropriateness of QCA's proposed method of escalating the existing incremental reference tariff by CPI for the West Moreton System;
- economic implications of asset optimisation, ie, a write-down of Queensland Rail's RAB; and
- appropriate cost allocation between coal and non-coal services.

The remainder of the report is structured as follows:

- in section 2 we set out the assessment framework that will guide our analysis;
- in section 3 we assess the QCA's draft decision for the West Moreton System reference tariff;
- in section 4 we set out the shortcomings associated with asset optimisation; and
- in section 5 we address issues related to cost allocation.

In appendix A1, we set out regulatory precedent in relation to asset optimisation.

[1] Queensland Competition Authority, *Queensland Rail 2025 draft access undertaking – draft decision*, June 2024, pp 1-2.

# 2. Assessment framework

In this section we set out the assessment framework that the QCA uses when deciding whether to approve access undertakings.

We have adopted the QCA's assessment framework when making our assessments and recommendations in this report. We have also considered regulatory decisions made by the QCA and other regulators where relevant.

## 2.1 QCA's assessment framework

The QCA Act is the foundational reference point for decisions made by the QCA. The QCA must make decisions in a manner that is consistent with the QCA Act. In relation to the approval of access undertakings, the QCA's assessment criteria are:[2]

> (a) promote the economically efficient operation of, use of and investment in, significant infrastructure by which services are provided, with the effect of promoting effective competition in upstream and downstream markets;
>
> (b) the legitimate business interests of the owner or operator of the service;
>
> (c) if the owner and operator of the service are different entities – the legitimate business interests of the operator of the service are protected;
>
> (d) the public interest, including the public interest in having competition in markets (whether or not in Australia);
>
> (e) the interests of persons who may seek access to the service, including whether adequate provision has been made for compensation if the rights of users of the services are adversely affected;
>
> (f) the effect of excluding existing assets for pricing purposes;
>
> (g) the pricing principles … that the price should:
>
> a. generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved;
>
> b. allow for multi-part pricing and price discrimination where it aids efficiency;
>
> c. not allow a related access provider to set terms and conditions that discriminate in favour of the downstream operations of the access provider or a related body corporate of access provider or a related body corporate of the access provider, except to the extent the cost of providing access to other operators is higher; and
>
> d. provide incentives to reduce costs or otherwise improve productivity; and
>
> (h) any other issues the authority considers relevant.

'Efficiency' is a key concept underpinning the QCA's assessment criteria. It is a term of art in economics and is widely accepted by economists as having three distinct dimensions, being:[3]

[2] QCA Decision, *Queensland Rail 2020 Draft Access Undertaking*, February 2020, p 2.

[3] For further discussion of the dimensions of efficiency and their relation to public policy see Productivity Commission, *On efficiency and effectiveness – some definitions*, May 2013.

- **productive efficiency**, ie, production using a least-cost combination of inputs;
- **allocative efficiency**, ie, production of an optimal set of goods and services, which is allocated so as to provide the maximum benefit to society; and
- **dynamic efficiency**, ie, achieving productive and allocative efficiency over time, in the face of changes in technology and consumer preferences.

Each of these dimensions of efficiency are reflected in the architecture of the QCA's assessment criteria, particularly criteria (a) and (g). By way of explanation:

- the reference to efficient 'operation of' and 'investment in' significant infrastructure refers to the productive dimension of efficiency, ie, this is promoted if decisions made by the QCA promote the supply of infrastructure services using the least cost combination of both capital and operating inputs;
- the reference to efficient 'use of' significant infrastructure refers to the allocative dimension of efficiency, ie, this is promoted if decisions are made that give rise to a level and structure of prices that both recover the cost of making infrastructure services available and maximise the extent to which infrastructure services are allocated to those consumers that derive the greatest benefit from them without discrimination, so as to maximise the benefit to society; and
- dynamic efficiency is the promotion of productive and allocative efficiency over time, ie, this is promoted if decisions are made that balance the pursuit of productive and allocative efficiencies for current consumers with the requirement to invest for productive and allocative efficiency gains in the long term.

Criterion (a) also makes explicit reference to promoting efficient competition in upstream and downstream markets. QCA decisions should therefore avoid outcomes that may have a detrimental effect on competitive conditions in related upstream and downstream markets.

The final relevant part of the QCA's assessment criteria is to protect the interests of the owners and operators, and of potential access seekers. We note that these criteria make no distinction between existing access holders or new access seekers.

## 2.2 Our assessment framework

We have adopted QCA's assessment framework when making our assessments and recommendations in this report. The following criteria are of particular relevance to our assessment:

- the three dimensions of efficiency;
- the pricing principle that prices should generate revenue for the service that is at least enough to meet efficient costs of providing access to the service; and
- the requirement that the interests of Queensland Rail, existing access holders, and potential access seekers should be protected.

We have also considered regulatory decisions made by the QCA and other regulators where relevant.

# 3. Proposed West Moreton System reference tariff

In this section, we discuss our assessment of the QCA's draft decision to potentially apply CPI escalation to the existing AU2 incremental West Moreton System reference tariff as an interim solution until there is greater certainty on coal volumes, if Queensland Rail and key stakeholders are not able to negotiate the key elements of the reference tariff.

## 3.1 Volume uncertainty on the West Moreton System

Queensland Rail prepared its DAU3 when there was significant uncertainty regarding the future volume of coal that would be transported on the West Moreton System. When DAU3 was submitted on 10 November 2023, Queensland Rail expected that coal volumes would increase to 9.6 mtpa during DAU3. This was based on the following assumptions:

- Cameby Downs mine would continue to operate, noting that Queensland Rail has a contract with Yancoal, the owner of Cameby Downs;
- New Wilkie mine, which recommenced operations during AU2, would continue to operate in DAU3 (Queensland Rail has a current contract with New Wilkie Energy); and
- New Acland Mine Stage three expansion would proceed as it has all of its approvals, subject to the outcome of ongoing court challenge.

We set out the coal volume forecasts for each mine in table 3.1 below.

Table 3.1: West Moreton System forecast coal volumes over DAU3 period (mtpa)

| Coal mine | FY26 | FY27 | FY28 | FY29 | FY30 |
|---|---|---|---|---|---|
| Cameby Downs | | | | | |
| New Wilkie | | | | | |
| New Acland Stage 3 | | | | | |
| **Total** | **8.2** | **9.5** | **9.6** | **9.6** | **9.6** |

*Source: AME forecast volumes of coal transported on the West Moreton System. Forecasts developed by AME were initially reported for calendar years. To calculate volume by financial year, we have taken the average of the two relevant calendar year. For example, volumes for 2025-26 is calculated as average volumes in 2025 and 2026. Forecasts are reported in figure 2-2 in attachment 5 of the DAU3, see:* Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document,* Attachment 5: HoustonKemp Expert Report – Regulatory Treatment of Coal Related Assets, November 2023.

Several developments have occurred since Queensland Rail submitted its DAU3. These include:

- New Wilkie Energy entering administration on 27 December 2023,[4] noting that Wilkie Creek mine continues to have a contract with Queensland Rail;[5] and
- New Acland Mine Stage 3 continuing to be subject to a legal challenge launched by the Oakey Coal Action Alliance on 16 May 2023 regarding the site's water licence over concerns that it will interfere with groundwater.[6]

[4] Chen, D, *More than 100 workers laid off after Queensland coal miner New Wilkie Energy enters administration,* 4 January 2024, accessed from: https://www.abc.net.au/news/2024-01-04/queensland-coal-mine-administration-wilkie-creek/103284808.

[5] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 99.

[6] Environmental Defenders Office, *Oakey Coal Action Alliance launches legal challenge against New Aclan*, 16 May 2023, accessed from: https://www.edo.org.au/2023/05/16/oakey-coal-action-alliance-launches-legal-challenge-against-new-acland/.

The potential outcomes of these ongoing developments mean that volumes transported on the West Moreton System during DAU3 could range between:

- 2.5 mtpa [redacted]; and
- 9.6 mtpa if all three mines continue to operate in AU3.

We understand that this uncertainty is expected to be resolved prior to when the QCA is required to make its final decision. This raises the prospect that the final decision could be made when uncertainties around volume demand are resolved.

## 3.2 Queensland Rail's proposal

### 3.2.1 Overview of AU2 tariff and Queensland Rail's proposed tariff for DAU3

When the AU2 West Moreton System coal reference tariff was developed there was uncertainty around tonnage levels and international coal prices were low. New Acland Mine Stage 3 had not yet been approved and New Acland Stage 2 Mine was near depletion. The Wilkie Creek Mine had ceased operations.

Due to this, the QCA determined the West Moreton System coal reference tariff based on coal volumes of 2.1 mtpa, [redacted]

There were concerns that setting the West Moreton System coal reference tariff at 2.1mtpa would be unaffordable for Yancoal. On the basis that there was a reasonable chance that New Hope Stage 3 Mine would gain its approvals, Queensland Rail agreed to an approach where the QCA would determine the Ceiling (Actual) West Moreton System coal reference tariff ($36.46/'000 gtk ($2020/21) and a lower temporary Incremental (affordable) West Moreton System coal reference tariff ($21.50/'000 gtk) ($2020/21).

A loss capitalisation account was established to calculate the between the Ceiling West Moreton System coal reference tariff and the Incremental West Moreton System coal reference tariff, which would be approved annually by the QCA. The intent was that Queensland Rail would recover the loss capitalisation account balance when coal tonnages increased during DAU2 and/or as part of DAU3 starting at the approval of DAU3.

Table 3.2 below provides a high-level comparison of Queensland Rail's approach to setting the AU2 temporary incremental West Moreton System coal reference tariff and the proposed approach for DAU3. A key difference in approach is the revenue that Queensland Rail expects to collect. In sections 3.2.2 and 3.2.3 below we provide more details about the proposed tariff for DAU3 and the tariff for AU2 respectively.

Table 3.2: Comparison of AU2 tariff and Queensland Rail's proposed DAU3 tariff

| | AU2 | DAU3 |
|---|---|---|
| Tariff (real FY26 terms) | $26.42/000 gtk | $32.63/000 gtk |
| Total forecast coal volumes | 2.1 mtpa | 9.6 mtpa |
| Reference tariff reset trigger | When AU2 contracted coal volumes expected to reach 4.1 mtpa | If a contract is not renewed |
| WACC | 5.46 per cent | 7.39 per cent |
| Cost recovery | Tariff set with reference to incremental costs only as affordability was a concern to Queensland Rail given very low coal prices at the time.<br>Loss capitalisation account created. | Tariff set with reference to efficient costs.<br>Loss capitalisation account to be continued on the basis that Queensland Rail is recovering the balance of the loss capitalisation account, with no additional balance being added to the account. |
| Subject to CPI escalation annually over the regulation period | ✓ | ✓ |

### 3.2.2 Proposed tariff for DAU3

Queensland Rail has proposed a West Moreton System coal reference tariff of $32.63/000 gtk (real FY26 terms) for the West Moreton System in its DAU3. [7]

As was the case in previous access undertakings,[8] the DAU3 West Moreton reference tariff is derived using a building block methodology which incorporates forecast coal volumes, along with proposed opening regulatory asset base, weighted average cost of capital, capital expenditure, depreciation, appreciation, maintenance expenditure and operational expenditure.[9] This approach allows Queensland Rail to recover its efficient costs, including a reasonable rate of return.

The DAU3 West Moreton reference tariff has been developed based on 9.6 mtpa of coal volumes, which Queensland Rail considers to be the most likely coal volume forecasts when DAU3 was submitted to the QCA. To address uncertainties regarding coal volumes, Queensland Rail proposes 'triggers' within DAU3 that allow it to opt out of proposed capital investments that feed into the building block methodology used to estimate the tariff.[10]

Under this approach, Queensland Rail will seek a reference tariff reset each time a contract that is up for renewal is not renewed.[11] This reset would be sought via a Draft Amending Access Undertaking (DAAU) and would allow Queensland Rail to revise its capital and maintenance program to meet revised capacity requirements. The revision is in both the interest of Queensland Rail and the West Moreton System coal stakeholders as it ensures that only the efficient cost of providing the service is charged.

Queensland Rail also proposed to retain the Loss Capitalisation Account on the basis that Queensland Rail is recovering the balance of the loss capitalisation account, with no additional balance being added to the account. Queensland Rail has also proposed removing the 'break-even' reference tariff reset trigger established under AU2. Both these features of AU2 are explained in section 3.2.3 below.

### 3.2.3 Tariff for AU2

The DAU3 West Moreton reference tariff is 24 per cent higher than that currently charged under AU2, which is $26.42 (real FY26 terms).[12]

Similar to DAU3, the AU2 West Moreton reference tariff determination process was also subject to coal volume uncertainties. In the early stages of the AU2 process, it was uncertain whether New Acland would continue to operate alongside the Cameby Downs mine. This gave rise to two potential forecast coal volumes:

- a high volume scenario of 9.1 mtpa; and
- a low volume scenario of 2.1 mtpa.

As the AU2 process progressed, it became apparent that New Acland Stage 3 would not operate in the short-term. Following this, Queensland Rail proposed a West Moreton reference tariff assuming 2.1 mpta of forecast coal volumes under the building block approach. Queensland Rail estimated that its reference tariff should be $36.46/000 gtk (real FY21 terms) under a building block approach.[13]

[7] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, p 12.

[8] This includes the 2008 access undertaking commencing 30 June 2010, Access Undertaking 1 (AU1) commencing 30 October 2016 and Access Undertaking 2 (AU2) commencing 2 July 2020. See: Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, p 8.

[9] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, p 9.

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

[11] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, p 30.

[12] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, p 37.

[13] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, pp 54-55.

Queensland Rail was concerned that the reference tariff calculated based on a building block approach would be unaffordable given the low volumes and low international coal prices at the time. To support the continued railing of coal traffic on the system, Queensland Rail proposed to adopt an incremental reference tariff of $21.50 (real FY21 terms).[14] In other words, Queensland Rail would only recover its incremental costs in the short term, rather than the efficient cost of providing access, including a return commensurate with the risks involved.[15]

Given the uncertainty of coal volumes beyond the short-term, AU2 included a trigger that allowed Queensland Rail to revise the West Moreton reference tariff should coal volumes increase during the regulatory period. Specifically, if coal volumes exceeded 4.1 mtpa during the regulatory period, this would trigger a reset of the reference tariff, via a DAAU.[16] To date, this threshold has not been breached.[17]

Under AU2, Queensland Rail maintains a Loss Capitalisation Account which records the difference between the ceiling reference tariff and the incremental reference tariff on an annual basis.[18] This mechanism was developed to allow Queensland Rail to recover revenue shortfalls if and when coal volumes increased sufficiently in future years.[19]

In addition, the reference tariff under AU2 was set with reference to incremental costs whereas proposed DAU3 tariffs are set with reference to efficient costs. Queensland Rail did not intend at the time to continue with an incremental reference tariff in DAU3 as it would result in increasing potential losses for Queensland Rail. Notwithstanding, concerns around affordability have lessened when compared to AU2 and coal volumes are expected to be substantially higher than those expected in AU2.

## 3.3 QCA's draft decision and reasoning

In its draft decision regarding DAU3, the QCA states that it is not satisfied that Queensland Rail's proposed West Moreton System reference tariff satisfies the approval criteria in section 138(2) of the QCA Act based on information provided to date.

Thus, the QCA's draft decision is to not approve the proposed reference tariff.[20] The QCA cites the following reasons for its dissatisfaction:[21]

- a lack of an agreed reasoned and prudent strategy for the West Moreton route service, which means investment in and use and operation of the infrastructure is likely not to be efficient because it is not clear the investment is required to meet customer demand, and it is thus not aligned with the object of Part 5 of the QCA Act (s. 138(2)(a))
- the uncertainty about volumes, given the status of customers' plans and contract renewals, which means an assessment cannot be made of whether the proposed investment in and operation of the infrastructure is efficient and thus aligned with the object of Part 5 (s. 138(2)(a))
- the uncertainty about whether the proposed volumes can actually be delivered, even with the proposed spending, which casts further doubt on the efficiency of the investment and indicates the spending is not in the interests of access seekers and access holders (ss. 138(2)(e) and (h))
- the associated uncertainty about the efficient level of costs and, consequently, whether the proposal provides Queensland Rail with expected revenue that is at least enough to recover

[14] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, pp 54-55.
[15] Queensland Rail, *Access Undertaking 2,* 1 July 2020, p 131-132.
[16] Queensland Rail, *Access Undertaking 2,* 1 July 2020, pp 134-135.
[17] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 91.
[18] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, p 55.
[19] Queensland Rail, *Access Undertaking 2,* 1 July 2020, p 131-132.
[20] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 92.
[21] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 92.

those costs and provide a return on investment commensurate with the regulatory and commercial risks involved (ss. 138(2)(b) and (g) and s. 168A(a))

The QCA concludes that the above reasons create 'significant obstacles' to using a building block approach to estimate an efficient price.[22] In lieu of a 'firm foundation' to calculate a reference tariff using a building block approach, and with regard to the approval criteria in section 138(2) of the QCA Act, the QCA outlines its preliminary position on an alternative approach to determine the DAU3 West Moreton reference tariff. This alternative approach is to index the AU2 incremental reference tariff by CPI (ie, the CPI approach).[23]

The QCA states the CPI approach could be a short-term solution, pending effective negotiations on an agreed reference tariff that may allow time to address the 'significant obstacles' to the building block approach. Specifically, adopting the CPI approach in the interim may allow time:[24]

- to gain greater certainty on volumes, which will enable more effective assessment for efficient investment in and use of rail infrastructure; and
- for a negotiated outcome, including a reasoned and prudent strategy which would promote efficient investment in, use of and operation of the West Moreton System for coal services.

Should greater certainty and/or a negotiated outcome be achieved during DAU3, the QCA proposes that Queensland Rail submit its building block-based reference tariff and related measures via a DAAU under section 142 of the QCA Act.[25]

The QCA states that the CPI approach may also be in the interests of:[26]

- all parties – since it is a price that access seekers and access holders have been willing to pay, and the price at which Queensland Rail has been prepared to provide access during the current regulatory period; and
- Queensland Rail – since it is likely to:
  - provide Queensland Rail with sufficient revenue to at least cover its incremental costs, based on expected volumes in the short term; and
  - recover its efficient costs at reasonably expected volumes, and there are mechanisms, including DAAUs, for it to recover additional costs if volumes rise significantly.

The proposed adoption of the CPI approach rests on the assumption that annual volumes could reasonably be expected to reach a level where Queensland Rail could recover its efficient costs, but would be below a level of demand where a step change in spending is likely to be required.[27] The proposal also relies on the justification that the West Moreton System has previously supported annual volumes of 7.8 million tonnes in FY12, ie, 1.8 mtpa shy of the maximum forecast for DAU3, with infrastructure at or below the current standard.[28]

Queensland Rail had advised us that it considers the QCA's break-even point of 4 mtpa is incorrect. Queensland Rail has also advised that work required on the aging West Moreton Network to support reliable traffic is materially different to 2011-12 and significant capital and maintenance work would be required at both 7.8 mtpa and for levels well below this.

[22] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 92.
[23] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93
[24] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.
[25] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.
[26] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.
[27] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.
[28] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.

## 3.4 Our assessment QCA's draft decision

By way of summary, the QCA's draft decision for DAU3 can be summarised as follows:

- indexation of AU2 reference tariffs by CPI; and
- provisions for a tariff reset via DAAU, should greater certainty or negotiated outcomes be achieved during AU3.

In our opinion, the QCA's draft decision is inconsistent with approval criteria set out in the QCA Act for the following reasons:

- tariffs should be set with reference to efficient costs – not doing so would mean Queensland Rail either:
  - under-recovers its efficient costs, which is inconsistent with the requirement for revenue to be at least enough to cover efficient costs and contrary to the interest of Queensland Rail; or
  - over-recovers its efficient costs, which would be contrary to the interest of users;
- there is a risk that revenue collected could be below incremental costs – this has the potential to lead to allocative inefficiency since Queensland Rail has a financial incentive to close the line, even when users are willing to pay more than the incremental costs to keep the line open;
- it would not be in the interest of Queensland Rail since:
  - affordability concerns have lessened since AU2 and it now appropriate for Queensland Rail to recover efficient costs rather than incremental costs, notwithstanding the QCA Act criteria is recovery of efficient costs and not affordability;
  - there is a risk that Queensland Rail will be subsidising coal users; and
  - it is not clear if Queensland Rail would recover efficient costs at any level of demand; and
- it creates regulatory uncertainty, which in turn leads to dynamic inefficiency since it increases the risk of undertaking investment on the West Moreton System – regulatory uncertainty arises:
  - due to uncertainty regarding if and how tariffs will transition back to a building block approach, and
  - as the implications of decisions made by the QCA linked with the revenue requirement of the West Moreton System are no longer clear.

We discuss each of these points in further detail below.

### 3.4.1 Tariffs should be set with reference to efficient costs of providing service

The QCA's proposed approach is to adjust existing incremental tariff by CPI, rather than setting tariffs to recover the efficient costs of providing services. In other words, revenues collected are no longer related to the efficient cost of providing the service. Doing so means that Queensland Rail would either:

- over-recover its efficient costs, which would be contrary to the interest of users; or
- under-recover its efficient costs, which would be contrary to the interest of Queensland Rail and result in revenue that is lower than the efficient costs of providing the service.

Both outcomes are inconsistent with the approval criteria set out in the QCA Act. Further, setting tariffs with reference to efficient costs is also consistent with QCA's approach to economic regulation in general and for Queensland Rail in past access undertakings. For example, Queensland Rail proposed indexation of its existing tariff by CPI for AU1. The QCA did not approve this, stating that:[29]

[29] QCA, *Decision: Queensland Rail's Draft Access Undertaking*, June 2016, p 118, accessed from: https://www.qca.org.au/wp-content/uploads/2019/05/30680_Secondary-Undertaking-Notice-attachment-QCA-Decision-1.pdf

> It is appropriate for the reference tariff to be based on a well-understood approach that derives the price from underlying costs and asset values. That has the benefits of:
>
> - providing regulatory certainty to access holders, access seekers and Queensland Rail; and
> - enabling all parties to assess the tariff implications of proposed measures such as expansions of the network or changes in train configuration or operation.
>
> The QCA's reference tariff approach therefore seeks to promote the efficient operation and use of, and investment in, the rail network. It also promotes the public interest, and is in the interests of access seekers and access holders (s. 138(2)(a), (d), (e), (h)).

### 3.4.2 QCA's proposed approach creates a risk that revenue collected could be below incremental costs

A key principle in economic regulation is that revenue collected by a service provider should be above incremental costs. Otherwise, the service provider will have a financial incentive to no longer provide the service, even when users are willing to pay a cost that is above incremental costs.

In coming to its draft decision, the QCA noted that its CPI approach may:[30]

> … be likely to provide Queensland Rail with sufficient revenue to at least cover its incremental costs, based on expected volumes in the short term…

AU2 tariffs were set to recover incremental costs with assumed coal volumes of around 2.1 mtpa. [redacted]

In the event that Cameby Downs is the only mine that operates on the West Moreton System during AU3, which Queensland Rail has considered unlikely, then we consider that it would be appropriate for West Moreton reference tariff to be reset based on the building block approach to ensure that Queensland Rail is recovering its efficient costs.

The QCA's statement that its CPI approach will likely generate sufficient revenue to cover incremental costs appears to assume that the incremental costs of providing rail services on the West Moreton System has or will increase at or below the rate of CPI for a given volume of demand. However, we consider that this assumption may not be true because:

- CPI is calculated with reference to a basket of goods and services, which would not align with those required by the Queensland Rail to provide below rail services – it follows that CPI is likely to increase at a different rate when compared to incremental costs of providing below rail services; and
- Queensland Rail has advised that rail assets used to provide West Moreton System have aged since AU2 and are therefore more costly to maintain – it follows that the incremental costs will be higher in DAU3 when compared to AU2.

### 3.4.3 QCA's proposed approach is not in the interest of Queensland Rail

In coming to its draft decision to propose the CPI approach, the QCA noted that its decision may be in the interest of Queensland Rail because: [31]

- it is the price that Queensland Rail has been prepared to provide access during the current regulatory period; and

[30] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.

[31] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.

- it is likely to recover its efficient costs at reasonably expected volumes, and there are mechanisms, including DAAUs, for it to recover additional costs if volumes rise significantly.

In our opinion, indexing CPI would not be in the interest of Queensland Rail because:

- affordability concerns have lessened since AU2, such that it is no longer appropriate to adopt tariffs that have been set to recover incremental costs;
- there is a risk that Queensland Rail will be subsidising coal users; and
- it is unclear whether Queensland Rail would be able to recover its efficient costs at any volume if existing tariffs prevail.

### Affordability concerns have lessened since AU2

We understand that Queensland Rail proposed incremental cost tariffs for AU2 due to concerns that ceiling cost tariffs would be unaffordable for Cameby Downs. Further, Queensland Rail had proposed a Loss Capitalisation Account so that any losses accrued during AU2 could potentially be recovered in future periods.

However, global coal prices have since recovered and affordability concerns have lessened since AU2. To further understand the affordability of its proposed tariff, Queensland Rail engaged us to undertake an affordability assessment as part of our previous report. Our analysis showed that proposed prices by Queensland Rail would still remain affordable with:[32]

- coal prices being up to 12 per cent lower than forecasts; or
- below rail reference tariffs increasing by up to approximately 150 per cent.

Our analysis suggests that affordability concerns have lessened. It follows that it is no longer appropriate to adopt tariffs that have been set to recover incremental costs.

### There is a risk that Queensland Rail will be subsidising coal users

Applying an appropriate cost allocation approach to the building block model will allow Queensland Rail to set a reference tariff that recovers the following costs from coal users:

- the direct costs of providing the services;
- the attributable costs of providing the services; and
- an appropriate allocation of the unattributable costs used to provide both the services on the West Moreton System and other services provided to other customers.

However, if Queensland Rail were to charge coal users prices that is below a reference tariff set based on building block costs, then this could mean that coal users pay an amount that is below either the direct costs or direct plus attributable cost of providing the service to coal users. If coal users pay an amount below the direct cost of providing the service, then coal users would be a recipient of a subsidy. If coal users pay an amount that is below direct and attributable costs, then there is a risk that coal users could be a recipient of a subsidy.

In summary, if coal users pay an amount that is below the reference tariff that is calculated based on building block costs, then there is a risk that coal users would be receiving either:[33]

- a subsidy from Queensland Rail; or

[32] HoustonKemp, *Response to stakeholder submissions on appropriateness of West Moreton system reference tariff*, 7 March 2024, p ii.

[33] For a further discussion on when concerns on cross-subsidy arises, please refer to ACCC, *Tests for assessing cross-subsidy*, June 2014.

- a cross-subsidy from other customers.

A subsidy leads to the risk of allocative inefficiency as the price paid by coal users is lower than the cost of providing the service. Further, a subsidy potentially raises competition concerns as it could distort outcomes in the coal market.

#### It is unclear if Queensland Rail would be able to recover its efficient costs at any volume if existing tariffs prevail

The QCA considers that Queensland Rail is likely to recover its efficient costs at reasonably expected volumes. In coming to this conclusion, the QCA appears to be relying on the following assumptions: [34]

- break-even volume is around 4 mtpa, assuming that costs in DAU3 remain aligned with costs incurred in AU2;
- volumes could reasonably be expected to be between 4 to 8 mtpa –the QCA has noted that there are a number of plausible scenarios that would result in coal volumes within this range; and
- that a step change in costs would not be required until volumes are more than 8 mtpa – the QCA noted that the West Moreton System was previously able to support annual volumes of 7.8 mtpa with infrastructure at or below the current standard.

The basis on which the QCA has made these assumptions is unclear. However, we note the following:

- it is inappropriate to assume that a step-change in costs is only required when volumes reach 8 mtpa – West Moreton System last supported volumes of 7.8 mpta in 2011-12, or more than a decade ago, and has not supported volumes of more than 4 mpta since 2019-20;[35] and
- it is not appropriate to assume that efficient costs in AU2 are comparable to efficient costs in DAU3:
  - we understand that the rail assets used to provide West Moreton System have aged since AU2;
  - the increase in weighted cost of capital (WACC) will increase the efficient cost of providing the service; and
  - coal volumes of 4 to 8 mtpa would be two to four times higher than those assumed in AU2.

Given the above, it is unclear if Queensland Rail would be able to recover its efficient costs at any volume of demand if AU2 tariffs continue to prevail. Put another way, Queensland Rail would only be able to recover its costs 'by chance' rather than 'by design' and there would be no transparency as to whether Queensland Rail has under- or over-covered its efficient costs.

### 3.4.4 The QCA's decision creates regulatory uncertainty

In our opinion, the QCA's draft decision creates regulatory uncertainty, which in turn leads to economic inefficiency since it increases the risk of undertaking investments on the West Moreton System.

This regulatory uncertainty arises because:

- it is unclear if and how tariffs will transition back to a building block approach; and
- the implications of some of the decisions made by the QCA are no longer clear.

#### It is unclear if and how tariffs will transition back to a building block approach

The QCA has raised the prospect that Queensland Rail would submit a DAAU as required in the future. Under previous arrangements, a DAAU would involve resetting tariffs based on the building block approach.

[34] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 93.

[35] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 97.

In practice, we expect that this would involve amending existing revenue allowances to allow Queensland Rail to recover incremental costs that the QCA considers to be prudent and efficient.

Put another way, the amended revenue allowance would reflect:

- efficient costs determined by the QCA in its final decision for AU3; plus
- incremental costs to undertake projects to accommodate increases in demand.

This approach requires the QCA to estimate efficient costs with and without the DAAU. It follows that it is unclear how tariffs would transition back to a building block approach if a trigger event occurred, since there is no longer any understand of efficient costs without the trigger.

### The implications of some of the decisions made by the QCA are no longer clear

The decision to adjust AU2 tariffs by CPI also creates uncertainty regarding other decisions made by the QCA that affect total revenue requirements, and therefore reference tariffs. For example, the implications for Loss Capitalisation Account, accelerated depreciation and WACC are unclear because:

- Loss Capitalisation Account is calculated based on revenue collected by Queensland Rail and efficient costs of providing services – it is unclear how the Loss Capitalisation Account would be rolled forward without an estimate of efficient costs;
- accelerated depreciation would result in tariffs that are higher than those calculated based on the technical life of the asset – setting tariffs based on the CPI approach means that it is no longer clear what depreciation profile is associated with the revenue collected by Queensland Rail; and
- a higher WACC would lead to an increase in total efficient costs, and therefore a higher reference tariff – setting tariffs based on the CPI approach creates a disconnect between the QCA's WACC decision and revenue collected by Queensland Rail.

Similarly, the implications of decisions the QCA makes on the opening RAB, maintenance, capital, and operating cost are unclear, as they no longer have any bearing on the reference tariff.

## 3.5 Our recommendations – an alternative approach

In its draft decision, the QCA considers that it may be appropriate to approve an alternative approach proposed by Queensland Rail or other stakeholders in its final decision.[36] In our opinion, it would be useful to consider how demand uncertainty is handled in other regimes, such as the approach adopted by the Australian Energy Regulator (AER) when regulating energy network businesses.

The transition towards renewable energy has created uncertainty with respect to the need for, and timing of, certain large scale transmission projects. The AER's approach to deal with such projects is to require network businesses to submit a contingent project application (CPA) when required. A contingent project is a project that the AER considers as reasonably required to be undertaken, but is excluded from the ex ante capital expenditure allowance in a revenue determination because of uncertainty about its requirement, timing or costs.[37] Box 3.1 provides an overview of the CPA process.

[36] QCA, *Decision: Queensland Rail's Draft Access Undertaking*, June 2016, p 118, accessed from: https://www.qca.org.au/wp-content/uploads/2019/05/30680_Secondary-Undertaking-Notice-attachment-QCA-Decision-1.pdf

[37] AER, *Process guideline for contingent project applications under the National Electricity Rules*, September 2007, p 2.

### Box 3.1: Dealing with uncertainty in the electricity sector – contingent project application process

Large transmission investments are subject to greater uncertainty than business-as-usual investments. One response to this uncertainty is that contingent project applications (CPAs) for 'actionable' projects are permitted to be staged. This staging reduces the risk of actionable ISP projects and increase flexibility to respond to changing market conditions or project risks as they arise, since each stage can reveal important information about the project and thus reduces the uncertainty associated with its costs and/or benefits.

Actionable projects are generally expected to undergo two CPA stages, namely:

- a CPA for early works activities, ie, activities that commence prior to the construction of a transmission project in order to improve cost estimates and help ensure the project can be delivered in a timely manner; and
- a CPA for the bulk of project costs and the physical delivery of the actionable ISP project.

In particular, the first CPA for early works provides a separate process for approving efficient and prudent planning and design costs ex-ante. This incentivises TNSPs to resource the design and planning phase of a project adequately, which will allow project risks to be identified and quantified robustly while enabling innovative and cost-effective design.

Cost pass through provisions and reopeners are two additional mechanisms that deal with uncertainty. A cost pass through event is an event that 'occurs beyond the reasonable control of a network business and has not been accounted for in its current 5-year revenue determination.' Under the NER, network businesses may submit cost pass through applications to the AER to recover the efficient costs incurred by the event.

In contrast, a reopener is a regulatory mechanism that allows for adjustments to a previously set revenue allowance or regulatory determination within the current regulatory period in response to unforeseen events or significant changes in circumstances.

The CPA process means that revenue determinations cover projects that have reasonable certainty with respect to its requirements, timing and costs. Any contingent project would be assessed when a trigger has occurred, with corresponding amendments made to the revenue requirements to accommodate capital expenditure and incremental operating expenditure reasonably required to undertake the contingent project.[38]

In our opinion, the QCA's decision for AU2 is similar to the AER's CPA process. That is, the QCA's decision for AU2 covers the scope of projects that are required to meet coal volumes of 2.1 mpta, and triggers are in place to allow Queensland Rail to submit a DAAU if volumes are expected to materially exceed 2.1 mpta.

We also consider Queensland Rail's proposed approach for DAU3 to be similar to the AER's CPA process and the QCA's decision for AU2, in that:

- proposed tariffs are set based on what Queensland Rail considers to be the most likely demand scenario; and
- there are triggers in place to allow Queensland Rail to opt out of undertaking expenditure if volumes do not eventuate, with corresponding adjustments to the reference tariff.

Queensland Rail's proposed trigger is a top-down trigger, whereby investments are taken out if volumes do not eventuate. This contrasts with a bottom-up trigger, where investments are added if trigger event occurs.

[38] AER, *Process guideline for contingent project applications under the National Electricity Rules*, September 2007, p 12.

In theory, both bottom-up and top-down triggers should lead to the same outcome, since investment is only incurred if volumes become firm. Given this, we consider that there is merit in setting baseline capital expenditure based on most likely demand outcomes. This reduces the likelihood that a trigger event occurs, thereby reducing administrative costs to all stakeholders involved.

If the QCA considers that Queensland Rail's proposed top-down trigger is inappropriate due to the uncertainty associated with coal volumes of 9.6 million mpta, then we suggest that the QCA consider adopting the following approach:

- determine baseline scenario of demand – in our opinion, this is merit in basing this on the most likely demand outcome;
- require Queensland Rail to put forward its proposed capital and maintenance program to deliver the baseline scenario of demand;
- assess prudency and efficiency of proposed capital and maintenance, taking into account submissions from stakeholders and negotiation outcomes; and
- set reference tariff to recover efficient costs, with clearly defined triggers (which could be based on if and when contracts are renewed) on when tariffs should be reset to address concerns around demand uncertainty.

In our opinion, the approach above would better promote the approval criteria set out in the QCA Act because it:

- sets reference tariffs to recover efficient cost of providing the service, which is consistent with QCA Act approval criteria;
- does not lead to concerns around subsidisation of coal users; and
- promotes regulatory certainty, which promotes dynamic efficiency as it lowers the risk of undertaking investments on the West Moreton System; and
- promotes allocative efficiency, since:
  - the reference tariffs will reflect the efficient cost of providing the service, thereby sending an appropriate price signal to users; and
  - it improves Queensland Rail's ability to recover efficient costs, thereby increasing its incentive to continue to provide the service.

# 4. Asset optimisation

In a previous report for Queensland Rail, we set out our view that asset optimisation on the West Moreton System is inappropriate. We observe that:[39]

- the pricing principles in the QCA Act require that access prices should generate expected revenues for the service that is sufficient to meet efficient costs of providing services;
- Queensland Rail is highly exposed to the market in its ability to recover costs, which prevents Queensland Rail from charging tariffs that are unaffordable; and
- asset optimisation has broader implications for economic efficiency across all sectors regulated by the QCA.

In this section, we set out our assessment of issues raised by the QCA and stakeholders in relation to asset optimisation.

## 4.1 Issues raised in QCA's draft decision

The QCA discussed the prospect of asset optimisation in its draft decision but did not make a decision as to whether asset optimisation was appropriate. In its discussions, the QCA noted our findings that optimising assets would create an undesirable regulatory precedent, but considered that this would be: [40]

> … unlikely but would be interested in stakeholder views on which regimes would most likely be affected and why.

The QCA also discussed comments raised by other stakeholders, including:[41]

- contentions made by Aurizon Coal and Bulk and Yancoal that historical claimed capacity of the West Moreton System might be overstated and asset values might reflect past capacity estimated that are no longer justified; and
- asset optimisation would improve the affordability of reference tariffs.

The QCA also considers it arguable that it would be inefficient to accelerate the return of assets with expired effective lives since it requires users to pay for assets with no practical economic utility, particularly in cases where this results in an unaffordable reference tariff. [42]

## 4.2 Assessment of issues raised by the QCA and stakeholders

As section 4.1 above discusses, the key issues raised in the QCA's draft decision are as follows:

- whether Queensland Rail's RAB should be written down due to purported inefficiency in capital expenditure;
- whether asset optimisation should occur to improve affordability of reference tariffs; and
- whether a RAB write-down will create an undesirable regulatory precedent for economic regulation throughout Queensland and Australia.

[39] HoustonKemp, *Response to stakeholder submissions on appropriateness of West Moreton system reference tariff*, 7 March 2024, p 28.

[40] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, footnote 441.

[41] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, footnote 441.

[42] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, footnote 441.

We set out our assessment of these three issues in sections 4.2.1 to 4.2.3 below.

### 4.2.1 The RAB should not be written down for purported inefficiency

We consider that Queensland Rail's RAB should not be written down for purported inefficient capital expenditure because:

- expenditure that is rolled into the RAB has already been assessed as efficient by the QCA; and
- under the building block model, the RAB is unrelated to the capacity or value of the asset.

#### Expenditure that is rolled into RAB has been assessed as efficient by the QCA

Aurizon Coal and Bulk's submission suggests that coal's share of network costs may have been overstated.[43] We discuss the issue of cost allocation further in section 5 below.

However, we note that Queensland Rail's RAB would already have been assessed by the QCA as efficient, since inefficient capital expenditure would not have been allowed to be rolled into the RAB. The two main mechanisms for ensuring that only efficient capital expenditure is rolled into the RAB are as follows:[44]

- regulatory determination process, where the QCA:
  - has already assessed the capital expenditure that Queensland Rail incurred in the current regulatory period, before it is rolled into the opening RAB for the next regulatory period; and
  - determines a capital indicator, which is an ex ante estimate of the capital expenditure that Queensland Rail will incur during the next regulatory period; and
- capital expenditure claim – where the QCA conducts an annual ex post assessment of the prudency of Queensland Rail's capital expenditure before it is rolled into the RAB, whereby any differences between the approved capital expenditure and the relevant capital indicator will be reconciled through a capital expenditure carryover account.

The above processes mean that the QCA assesses Queensland Rail's capital expenditure through two processes before it is rolled into the RAB, including one ex-ante assessment at the start of the regulatory period and one ex-post assessment.

#### RAB is unrelated to the capacity or value of the asset

Yancoal submits that one objective for writing down Queensland Rail's RAB is that it would better reflect the nature and value of the current network as a result of previous investments.[45] Glencore similarly suggests that Queensland Rail's RAB should be optimised significantly, such that charges focus solely on incremental fixed costs.[46]

In our opinion, this argument misinterprets the role of the RAB under the building block model. Specifically, the building block model is not designed to ensure that the value of the RAB reflects its current economic value. Instead, the fundamental characteristic of the building block model is that it ensures the regulated business recovers its sunk costs by depreciating its regulated assets only once and receives a return on assets while they remain in the RAB, ie, undepreciated.

[43] Aurizon, *Queensland Rail 2025 draft access undertaking*, Submission to QCA, 2 February 2024, pp 71-72.

[44] QCA, *Queensland Rail 2020 draft access undertaking*, Decision, February 2020, pp 68-69. Also see for example: QCA *Queensland Rail's 2018-19 capital expenditure claim*, Decision notice, 20 August 2020.

[45] Yancoal, *Initial Submission in response to QR's AU3 Access Undertaking*, 2 February 2024, p 12.

[46] Glencore, *Submission to the Queensland Competition Authority: Queensland Rail Draft Access Undertaking 3*, 14 March 2024, p 5.

This feature of the building block model is well understood among Australian regulators. For example, the NSW Independent Pricing and Regulatory Tribunal (IPART) states in 2023 regarding the distinction between the value of the RAB and the economic value of assets that:[47]

> **The RAB is unlikely to match the actual assets owned by a business because of the way we value asset bases, contributed assets and apply depreciation.**
>
> **The RAB simply reflects all costs that have not been recovered from historical or current customers, taxpayers or developers.** We consider, for most regulated water businesses, there is an acceptable range of asset lives that could apply to the RAB. Businesses may propose and justify changes to asset lives within this range (as outlined in our 'Equitable and efficient cost recovery' principle). (emphasis added)

We consider that asset optimisation would introduce regulatory uncertainty and reduce dynamic efficiency by increasing the risk of undertaking investment on the West Moreton System. This ultimately will be detrimental to the long-term interests of both Queensland Rail and its customers.

The Australian Energy Market Commission (AEMC) expressed a similar view in 2006, where it stated that:[48]

> A key mechanism for managing the investment risk for TNSPs was to 'lock-in' and roll forward the RAB from one regulatory period to the next. This aimed to give greater security to investors in the transmission system that their investments would be treated in an appropriate way over time. **More specifically, the RAB would not be subject to optimisation at regulatory resets to reflect the economic value of the assets to users, which would otherwise present a significant risk to investors.** (emphasis added)

The ACCC made a similar observation in 2011 when it decided to adopt a building block model for Telstra:[49]

> Locking-in a value for the RAB fosters predictable revenue and price paths, thereby minimising the likelihood of windfall gains or losses. This certainty promotes efficient use of and investment in infrastructure.

The ACCC also considered whether asset optimisation would be justified on concerns of 'gold plating' of electricity networks, which we describe in appendix A1.2 below. In summary, the ACCC:[50]

- concluded in 2018 that some electricity distribution networks had over-invested in their networks by engaging in 'gold plating'; but
- did not recommend a forced write-down of the RAB for privately owned networks due to the 'significant risk of introducing the perception of sovereign risk by investors in electricity networks (or more broadly) in Australia', which in turn may increase materially the required rate of return for investments.

Instead, the ACCC recommended voluntary write-downs for government-owned networks or government-funded rebates on network charges.[51] No state government undertook such voluntary RAB write-downs of the networks that they owned.

### 4.2.2 Pricing considerations do not justify writing down the RAB

We consider that pricing considerations do not justify writing down the RAB since:

[47] IPART, *Water regulation*, Handbook, July 2023, p 62.

[48] AEMC, *National electricity amendment (economic regulation of transmission services) rule 2006 no. 18*, Rule determination, 16 November 2006, p 98.

[49] ACCC, *Inquiry to make final access determinations for the declared fixed line services*, Final report, July 2011, p 133.

[50] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, pp 168-172.

[51] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, pp 166-170.

- affordability concerns have lessened since AU2;
- there is a risk that Queensland Rail could be subsidising coal users; and
- writing down the RAB due to affordability implicitly exposes Queensland Rail to the downside risk of coal prices without any potential upside.

### Affordability concerns have lessened since AU2

Another rationale that stakeholders have put forward to support asset optimisation is that doing so improves the affordability of the reference tariff.

We have previously analysed the affordability of calculating depreciation with reference to weighted average mine life for the West Moreton Ssystem in our earlier reports for Queensland Rail. Our analysis shows that all three mines operating on the West Moreton System will generate positive EBIT from 2025 onwards even with accelerated depreciation on Queensland Rail's RAB.[52]

Further, as we describe in section 3.4.3 above, our analysis shows that prices proposed by Queensland Rail will still remain affordable with:[53]

- coal prices being up to 12 per cent lower than forecasts; or
- below rail reference tariffs increasing by up to approximately 150 per cent.

Put another way, we consider that affordability concerns have lessened given since AU2 as coal prices have recovered and there is a realistic prospect that coal volumes could be two to four times higher than the 2.1 mtpa assumed for AU2.

We note that recovery of efficient costs, rather than affordability concerns, is explicitly mentioned as an approval criterion in the QCA Act.

### There is a risk that Queensland Rail could be subsidising coal users

In section 3.4.3 above, we discuss that there is a risk that Queensland Rail could be subsidising coal users if the revenue pay by coal users is below direct and attributable costs of providing the coal services.

We note that an asset write-down does not lower the direct and attributable costs of providing coal service. However, it lowers the reference tariff that is payable by coal users. In our opinion, this leads to the risk that coal users are a recipient of a subsidy, which could in turn lead to allocative inefficiency and distort market outcomes in the coal market.

### Write-down of RAB due to affordability implicitly exposes Queensland Rail to downside risk of coal prices without any potential upside

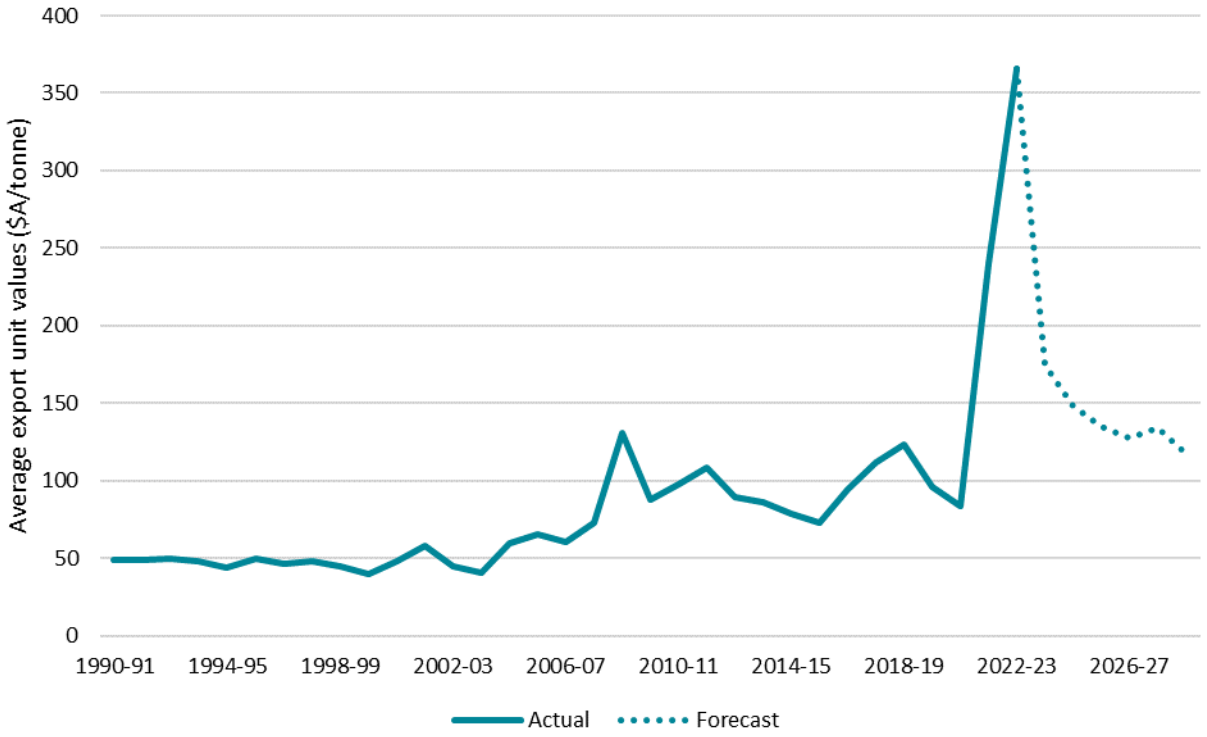
A key driver of the affordability of the reference tariff is the prevailing coal price. When coal prices are high, coal users are able to pay a higher reference tariff and vice versa. Other factors also influence coal users' ability to pay, such as the exchange rate of the Australian dollar compared to other currencies. It follows that affordability of a reference tariff can vary significantly over time.

By way of example, between 2016-17 and 2022-23, average prices for each financial year have ranged from A$83 per tonne to A$366 per tonne. We show in figure 4.1 below the average thermal coal price from 1990-91 to 2022-23, along with forecast prices up to 2028-29.

[52] HoustonKemp, *Regulatory treatment of coal related assets*, 3 November 2023, pp 19-23.

[53] HoustonKemp, *Response to stakeholder submissions on appropriateness of West Moreton system reference tariff*, 7 March 2024, p ii.

Figure 4.1 Historical prices for Australian thermal coal




*Source:* Department of Industry, Science and Resources, *Resources and energy quarterly*, March 2024. *HoustonKemp analysis.*

Global coal prices are likely to be the main driver of affordability of reference tariff. If the QCA optimises the RAB on the basis of affordability because of low prevailing coal prices, then this implicitly links Queensland Rail's ability to recover its efficient costs to fluctuations in global coal prices.

Further, we expect that any asset optimisation is likely to be asymmetric, whereby the RAB:

- is written down when coal prices are low; but
- remains unchanged when coal prices increase.

The impact of the aforementioned asset optimisation approach would be as follows:

- Queensland Rail will be unable to recover its efficient costs, which would be inconsistent with the objectives in the QCA Act;
- the risk, and therefore costs, of undertaking investment on the West Moreton System will materially increase; and
- there will be a disincentive against undertaking investments on the West Moreton System, thereby leading to dynamic inefficiency, which we discuss in further detail in section 4.2.3 below.

### 4.2.3 Writing down the RAB for the West Moreton System creates regulatory uncertainty and an undesirable precedent

We have previously concluded that asset optimisation could have significant consequences for investments in economic regulation throughout Queensland and Australia.

The QCA considers that it is unlikely that writing down Queensland Rail's RAB would create an undesirable regulatory precedent. The QCA invites stakeholder views regarding which regulatory regimes would most likely be affected by the precedent set by a potential RAB write-down and why.[54]

We continue to consider that writing down the Queensland Rail's RAB will create an undesirable precedent, noting that:

- it raises the prospect that the QCA could write-down assets of businesses it regulates in future decisions; and
- other Australian regulators have raised concerns that writing down the RAB of a regulated business will introduce regulatory risks.

We discuss these observations in more detail below.

### It raises the prospect that QCA could write-down assets of regulated businesses in future decisions

A common and important regulatory principle is that regulatory arrangements should be as predictable and stable over time as doing so reduces the uncertainty associated with long term decisions that support making sunk investments in infrastructure assets with long asset lives, thereby promoting economic efficiency.

The QCA notes this principle in its statement of regulatory pricing principles, which states that: [55]

> … regulatory arrangements and outcomes in relation to pricing need to be as stable and predictable as possible given other objectives. Stability and predictability are likely to promote confidence in the regulatory arrangements and also economic efficiency by reducing uncertainty associated with long term decisions. However, there may be circumstances where stability of prices is not consistent with economic efficiency. In addition, predictability can be more important than stability per se if it is the key to facilitating efficient future decisions.

Given the importance of predictability and stability, regulated businesses generally expect that economic regulators are consistent with their decision making over time and across sectors.

Queensland Rail has made its investments on the basis that it is given the opportunity to recover its efficient cost of providing service. A write-off of the RAB would alter these expectations. That is, Queensland Rail will now expect that any capital expenditure it undertakes could be the subject of asset optimisation by the QCA. This would in turn discourage Queensland Rail from making such investments and materially increase the risk associated with these investments.

In our opinion, expectations for other businesses regulated by the QCA may also change as a result. This is because regulated businesses generally expect the QCA to make decisions that are consistent within and across sectors. It follows that asset optimisation of Queensland Rail's RAB has the potential to alter expectations of other regulated businesses.

The degree to which expectations are changed will depend on the rationale provided by the QCA. For example, if the rationale for optimisation is made on the basis that tariffs are becoming unaffordable because of declining usage due to exposure to coal, then this could alter expectations held by Aurizon Network and Dalrymple Bay Coal Terminal.[56]

By way of summary, writing down the RAB on the West Moreton System would increase the prospect that the QCA could undertake further write-downs in future decisions. This in turn increases investment risks for:

[54] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 106.

[55] Queensland Competition Authority, *Statement of Regulatory Pricing Principles*, August 2013, p 10.

[56] We note that West Moreton system transports thermal coal whereas Aurizon and Dalrymple Bay Coal Terminal handle metallurgical coal.

- Queensland Rail, which will have less incentive to continue investing in its existing assets, including the assets of the West Moreton System and other regulated assets; and
- other businesses regulated by the QCA, as it raises the prospect that their RAB could also be written down.

### Relevant statements made by other regulators

Multiple regulators have raised concerns that writing down the RAB of a regulated business will introduce regulatory risks. We have set these out in section 4.2.1 above. By way of summary:

- in the electricity transmission sector, the AEMC stated that optimising the RAB at regulatory resets to reflect the economic value of the assets to users would present a significant risk to investors;[57] and
- in the telecommunications sector, the ACCC considered that locking in the value of the RAB for Telstra would foster predictable revenue and price paths, such that the resulting certainty would promote efficient use of and investment in infrastructure.[58]

Further, in response to concerns regarding 'gold plating' of electricity networks, the ACCC decided not to recommend a forced write-down of the RAB for privately owned electricity networks because it could raise investors' perceptions of investing in the sector or in Australia as a whole:[59]

> Stakeholders have raised concerns that the 'business pays' approach may lead to problems for the broader regulatory regime. **Most obviously, any writedown by governments of the RABs of privately owned businesses would have a significant risk of introducing the perception of sovereign risk by investors in electricity networks (or more broadly) in Australia. They may require a material increase in the rate of return (as calculated by the WACC) as a result.** As noted above, ENA has argued that this would in fact lead to higher overall costs for end-users. The extent of such an increase in the WACC may be more limited if this was seen as a clear one-off event. **However, the ACCC considers that there would be clear regulatory risk introduced by a general writedown.** In any case, the evidence of overinvestment in private networks is not as clear. (emphasis added)

Similarly, the AER considers that RAB write-downs may increase financing costs for regulated gas pipelines and discourage efficient investments that in turn may increase long-term costs for consumers.[60]

The above discussion highlights the potential risk that asset write-downs could have significant consequence for investment for businesses regulated by the QCA and more broadly.

[57] AEMC, *National electricity amendment (economic regulation of transmission services) rule 2006 no. 18*, Rule determination, 16 November 2006, p 98.

[58] ACCC, *Inquiry to make final access determinations for the declared fixed line services*, Final report, July 2011, p 133.

[59] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, p 168.

[60] AER, *Regulating gas pipelines under uncertainty*, Information paper, November 2021, p 37.

# 5. Cost allocation for common network assets

In this section, we discuss Queensland Rail's proposed cost allocation approach for common network assets on the West Moreton System, the QCA's draft decision and relevant issues raised by stakeholders, and our assessment of appropriate approach for cost allocation for common network assets.

## 5.1 Queensland Rail's proposal and QCA's draft decision

For DAU3, Queensland Rail proposes to continue applying the same train path allocations between coal and non-coal services set out in AU2, ie:[61]

- 97/137 for pre-1995 common network assets;
- 97/113 for post-1995 common network assets; and
- 1/1 for coal specific assets.

New Hope Group accepts Queensland Rail's proposal to continue the allocation methodology approved for AU2, although New Hope Group questions whether the increases in Queensland Rail's corporate overhead costs and network business costs are consistent with the assertion that costs Queensland Rail's costs are mostly fixed.[62]

In contrast, Aurizon Coal and Bulk submits that there is a contradiction between Queensland Rail's proposal to:[63]

- incur significant capital and maintenance expenditure; and
- allocate the same 97 paths of capacity to coal users, albeit for a higher capacity of 9.6 mtpa.

According to Aurizon Coal and Bulk, this implies that coal's share of network costs has been overstated for the current regulatory period, stating that:[64]

> … it would appear that coal's share of network costs has been overstated for the current regulatory period.

Yancoal's responsive submission echoes the concerns raised by New Hope Group and Aurizon Coal and Bulk. Yancoal further suggests that the QCA should consider deducting from the Loss Capitalisation Account for over-recovery by Queensland Rail.[65]

The QCA's draft position is that it is minded to approve maintaining the current allocation in AU2. Nevertheless, the QCA invites stakeholder views on whether this allocation remains appropriate, given the emerging information about the actual capacity of the West Moreton System.[66]

## 5.2 Our assessment of cost allocation for common network assets

The economic implications of changing cost allocation would vary depending on whether it applies to AU2 costs, most of which have already been incurred, and AU3 costs, which have not been incurred. In our

[61] Queensland Rail, *Draft Access Undertaking 3 (DAU3) Explanatory Document*, November 2023, pp 7, 15, 18. See also: HoustonKemp, *Response to stakeholder submissions on appropriateness of West Moreton system reference tariff*, 7 March 2024, p 26.

[62] New Hope Group, *Queensland Rail's 2023 draft access undertaking: New Hope submission*, 2 February 2024, p 8.

[63] Aurizon, *Queensland Rail 2025 draft access undertaking*, Submission to QCA, 2 February 2024, pp 70-72.

[64] Aurizon, *Queensland Rail 2025 draft access undertaking*, Submission to QCA, 2 February 2024, pp 71-72.

[65] Yancoal, *Second submission in response to QR's AU3 access undertaking*, 14 March 2024, pp 3-4.

[66] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 107.

opinion, it would be inappropriate to change cost allocation approach for AU2 costs as doing so would result in windfall gains or losses to coal users or Queensland Rail.

In our opinion, there are several economic reasons for increasing the share of AU3 costs that are allocated to coal users. These are as follows:

- costs should be allocated on a causal basis where possible – as expansionary capital expenditure are caused by coal users, it would be appropriate to allocate all of these costs to coal users;
- common costs should be recovered in the least inefficient manner – our previous analysis on coal users' affordability to pay suggest that allocating a higher proportion of common costs to coal users would be consistent with Ramsey pricing principles; and
- it would improve Queensland Rail's ability to recover efficient costs – Queensland Rail currently under-recovers the costs that are allocated to non-coal users.

### 5.2.1 Economic implications of changing cost allocation for AU2 expenditure

The QCA uses cost allocation to determine the share of common assets that should be rolled into the opening regulatory asset base (RAB) for coal users for the next regulatory period. These shares are also used to allocate the capital indicator to calculate the West Moreton reference tariff.

The QCA's final decision for AU2 was that:[67]

> … it is appropriate to approve Queensland Rail's proposal in the 2020 DAU that West Moreton system efficient costs be allocated on the basis that 97 train paths are available for contracting by coal services.

On this basis, Queensland Rail has made investments on common assets during AU2 period on the assumption that these will be allocated to coal users on a 97/113 basis. In our opinion, any changes to this allocation would represent a retrospective change to the QCA's decision for AU2, noting that some AU2 projects will continue during DAU3.

The purpose of an access undertaking is to provide regulatory certainty to stakeholders regarding the terms and conditions of access for the period of the undertaking.[68] Making retrospective changes to an access undertaking that the QCA has already accepted would:

- result in windfall gains and losses for individual stakeholders; and
- increase regulatory risks while reducing regulatory certainty, which in turn would:
  - reduce the incentive to invest in assets that will be sunk; and
  - increase the required to return for Queensland Rail, as it increases the risks associated with investing in the West Moreton System.

### 5.2.2 Economic implications of changing cost allocation for DAU3 expenditure

#### Expansionary capex should be allocated on causal basis

The QCA has historically approved cost allocation methods that are broadly consistent with the following principles:

- costs that are directly incurred, or assets that are directly used, for providing a specific service should be directly identified as being allocated to that service;

[67] Queensland Competition Authority, *Queensland Rail 2020 Draft Access Undertaking, Decision*, February 2020, p 59.

[68] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, p 14.

- costs that are incurred, or assets that are used, in common for providing multiple services should be attributed on a reasonable basis of cost causality if there is a causal relationship between the resources used for the services; and
- assets, costs, revenues and investments that are jointly used for providing multiple services should be allocated on a reasonable basis if there is no direct causal relationship between the resources used for those services.

These three core principles are reflected in the cost allocation methods for Queensland Rail, Aurizon and Dalrymple Bay Coal Terminal.[69] The QCA has also approved methodological variations for costs associated with expansions. For example, Aurizon's 2017 DAU specifies a set of expansion pricing principles that apply to access seekers for coal carrying train services that require an expansion, whereby:[70]

- expanding users should generally pay an access charge that reflects at least the full incremental costs (capital and operating) of providing additional capacity;
- non-expanding users should not experience a material increase in reference tariffs due to an expansion triggered by expanding users;
- if expanding users face a higher cost than non-expanding users, a zero contribution to Aurizon Network's common costs from expanding users is generally acceptable; and
- an allocation of the expansion costs to non-expanding users may be appropriate where an expansion has clear benefits to those non-expanding users.

Similarly, Dalrymple Bay Infrastructure's 2021 undertaking for the Dalrymple Bay Coal Terminal includes expansion pricing principles in which the costs of terminal capacity expansions should be treated as forming:[71]

- part of the existing terminal for the purpose of determining access charges if this would be expected to decrease unit costs for users of the existing terminal; and
- a separate terminal component if treating it as part of the existing terminal would increase unit costs for users of the existing terminal, subject to consideration of circumstances such as:
  - the expected materiality of the increase in the existing terminal's unit cost;
  - the extent to which the expansion will operate in an integrated way with the existing terminal or as a standalone development;
  - the extent to which the expansion is likely to benefit users of the existing terminal, such as through higher efficiency, reliability or flexibility of the existing terminal; and
  - any differences in the risks of providing access to users of the existing terminal in respect of additional terminal capacity created by the expansion.

Queensland Rail's proposed increase in capital expenditure arises because of the investment required to support a peak forecast capacity of 9.6 mtpa, whereby this peak forecast capacity reflects information provided by coal users.[72]

Consistent with cost allocation principles approved by the QCA for Queensland Rail, Dalrymple Bay Coal Terminal and Aurizon, expansionary capital expenditure should be attributed fully to coal users, since they are the access seekers for services that require an expansion to Queensland Rail's network.

[69] See: Queensland Rail, *Costing manual 2020*, Approved 22 October 2020, para 2.2(d). Aurizon, *Aurizon Network Pty Ltd costing manual*, June 2020, para 3.2(c). DBI, *Dalrymple Bay Coal Terminal 2021 Access Undertaking*, July 2021, para 11.7(h).

[70] Aurizon, *The 2017 Undertaking*, 18 February 2019, paras 6.4.1(a), (d).

[71] DBI, *Dalrymple Bay Coal Terminal 2021 Access Undertaking*, July 2021, para 11.8.

[72] Queensland Competition Authority, *Queensland Rail 2025 Draft Access Undertaking: Draft Decision*, June 2024, pp 98, 122.

In addition, there is no evidence that Queensland Rail's proposed increase in capital expenditure will benefit non-coal users. This suggests that non-coal users should not be required to pay for the additional capital expenditure required to support the higher peak forecast capacity of 9.6 mtpa.

For these reasons, we consider that the capital expenditure associated with increasing the peak capacity of Queensland Rail's network should be attributed fully to coal users. Since this allocation is higher than the current allocation of 97 out of 113 train paths set out in AU2, it follows that it would be appropriate to increase the allocation of coal assets for AU3.

### Ramsey pricing principles suggests that allocating a higher proportion to common network assets to coal carrying services could promote allocative efficiency

Allocative efficiency is promoted when prices for goods are set on a marginal cost basis. Marginal cost pricing promotes allocative efficiency as consumers will only consume the goods or service if the marginal benefits of doing so exceed the marginal cost of providing the good or service.

Infrastructure businesses that are subject to economic regulation typically involve substantial and lumpy sunk costs, with low marginal costs of providing the service. In other words, infrastructure businesses generally exhibit economies of scale, where average cost of production reduces as output increases. Under such a circumstance, marginal cost pricing will result in a financial loss for the infrastructure businesses. As explained by the QCA: [73]

> … where there are sunk costs, and capacity investment is lumpy, marginal cost generally lies below average cost. Prices set to recover only marginal cost would prevent the regulated firm from recovering all of its costs, which the Act requires. If the firm is not allowed to recover total costs, it will not have appropriate incentives to operate and invest.

Recovering the fixed costs of providing infrastructure services necessitates a move away from marginal cost pricing. As deviation from marginal cost pricing leads to allocative inefficiency, a key challenge for economic regulators is how fixed costs can be recovered in the least inefficient manner. One approach to doing so is Ramsey pricing. The QCA explains that:

> … Ramsey pricing or inverse elasticity rule charges each consumer based on its elasticity of demand (which reflects sensitivity of demand to price changes). The consumers with the highest elasticity pay the lowest price.

Ramsey pricing principles can also be used to guide the appropriate allocation of common costs between coal and non-coal carrying services on the West Moreton System. From an economic theory perspective, recovery of fixed costs would not be inefficient if it does not lead to any corresponding change in the quantity demanded. In other words, if a higher proportion of common assets are allocated to coal carrying services, and this does not lead to any corresponding reduction volume of coal carried, then this would be consistent with Ramsey pricing principles.

Our discussion in section 4.2.2 above also references the analysis from our previous report, in which we assess that coal mines have the ability to pay a higher access charge and doing so would not lead to premature closure of any mines or reduction in volume of coal transported.[74] It follows that Ramsey pricing principles suggest that a higher proportion of common assets should be allocated to coal carrying services.

[73] Queensland Competition Authority, *Statement of Regulatory Pricing Principles*, August 2013, p 10.

[74] HoustonKemp, *Response to stakeholder submissions on appropriateness of West Moreton system reference tariff*, 7 March 2024, p ii.

## Queensland Rail has limited ability to recover common costs that are allocated to non-coal carrying services

Non-coal carrying services on the West Moreton System are subject to pricing rules set out in the access undertaking, rather than a reference tariff. One of the pricing rules states that expected tariffs collected by Queensland Rail must fall between incremental cost and standalone cost of providing access.

Queensland Rail does not currently recover the ceiling price for non-coal services on the West Moreton System as these users have limited willingness to pay. It follows that allocating a higher proportion of common costs to non-coal services would be inconsistent with the QCA Act because:

- it would lead to allocative inefficiency, as Queensland Rail would have a financial disincentive to investment in common assets as a higher proportion of these costs would be unrecoverable; and
- be inconsistent with the pricing principle of generating expected revenue that is at least enough to meet efficient cost of service.

# A1. Regulatory precedent on asset optimisation

We discuss in section 4 above the AER's views on RAB write-downs, which we have also discussed briefly in our earlier reports for Queensland Rail.

Aside from this precedent, there is substantial regulatory precedent in Australia and New Zealand against writing down the value of regulatory assets that regulators have approved to be rolled into the RAB of a regulated business.

Various regulatory bodies have also acknowledged the importance of regulatory certainty in the building block framework compared to alternative regulatory frameworks with built-in asset revaluations. This regulatory certainty contributes to the long term interests of consumers.

In this appendix we discuss the relevant regulatory precedent in Australia and New Zealand, including:

- the Western Australian Economic Regulation Authority (ERA) and New Zealand Commerce Commission (NZCC) also deciding to accelerate depreciation for gas pipelines instead of writing down the RAB in response to stranding risks;
- the ACCC deciding not to recommend a forced write-down of the RAB for electricity distribution businesses in 2018 despite concerns about 'gold plating' and affordability;
- the ACCC switching to the building block model for Telstra in 2011 on the basis that it improves certainty relative to the previous total service long run incremental cost (TSLRIC) framework with built-in asset revaluations; and
- statements by the AER and NZCC regarding the potential loosening of regulation if the RAB can no longer be recovered.

## A1.1 Gas pipelines: accelerated depreciation as the preferred response to stranding risks

The AER, ERA and NZCC have all identified that the transition to net zero carbon emissions generates uncertainty for future gas demand, which generates asset stranding risks for regulated gas pipeline businesses. All three regulators have addressed this asset stranding risk by accelerating depreciation instead of writing down the RAB for these businesses.

In one of its early assessments on gas pipeline asset stranding risks, the AER rejected submissions that proposed to not compensate gas pipeline businesses for stranded assets. Instead, the AER stated that that allowing a return on partially utilised assets is one of the benefits that service providers receive as part of the regulatory framework. Such benefits are conferred on service providers to incentivise them to make large sunk investments:[75]

> However, we note that some stakeholders have submitted that not compensating businesses for stranded assets would be consistent with what happens in competitive markets when assets become stranded. **While the regulatory framework allows service providers certain benefits that may not be available in competitive markets (such as being allowed a return on assets that may only be partially utilised), such benefits are traded off so that service providers are willing to make large sunk investments in the first place.** That is, such benefits are part of the 'regulatory compact' as some economists have labelled it. (emphasis added)

As set out in our previous reports for Queensland Rail, the AER subsequently concludes in an information paper published in November 2021 that adjusting regulatory depreciation is a more appropriate option for

[75] AER, *Australian Gas Networks Access Arrangement 2016 to 2021, Attachment 5 – Regulatory depreciation*, Final Decision, May 2016, p 40.

managing asset stranding risks under the regulatory regime, compared to other options such as RAB write-downs.[76]

For example, the AER considers that a RAB write-down will require a new building block component that compensates gas pipeline businesses for the regulatory risk associated with such revaluations.[77]

Consistent with its information paper, the AER has accepted accelerated depreciation in cases where the evidence warranted doing so, eg:

- the AER accepted APT Petroleum Pipelines Pty Limited's (APTPPL) proposal to reduce the remaining asset lives of its 'Original pipeline' asset class from 43.6 years to two years and its 'Compressors' asset class from 35 years to 25.8 years for the Roma to Brisbane Pipeline;[78]
- accepted Evoenergy's (ACT) proposal to shorten the standard lives of new pipeline assets in the ACT region on the basis that the ACT Government's climate change policies would reduce future gas use;[79] and
- allowed $175 million in accelerated depreciation for Australian Gas Networks (Victoria & Albury).[80]

The ERA similarly accepts accelerated depreciation in its April 2024 draft decision for ATCO, in which it warns that not allowing the service provider to recover its costs would be detrimental to remaining customers:[81]

> Transition risk jointly affects the investments by networks and customers in their pipelines and appliances respectively. This reflects the codependent relationship between networks and customers, as the gas network derives its value from customers who connect to use the appliances that they have invested in.
>
> Current and future customer disconnections from the gas network reduces revenue for the network operator, risking the operator's ability to recover its sunk capital investment. **If a network services provider does not adequately recover its costs the network may not be properly maintained, or abandoned, which affects remaining customers who might otherwise face welfare losses from the reduced usage of their appliances (in terms of quality or duration).** (emphasis added)

The ERA has also accepted accelerating depreciation for DBP in an earlier decision in 2021. In that decision, the ERA accepts DBP's revised proposal to cap the regulatory economic life of its pipeline assets to end in 2063, which the ERA considers to be a credible projection of economic life within a wide range of possibilities.[82]

The ERA's decision for DBP includes its early view that accelerating depreciation may not be in the interest of consumers:[83]

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[76] HoustonKemp, *Regulatory treatment of coal related assets*, 3 November 2023, p 13. AER, *Regulating gas pipelines under uncertainty*, Information paper, November 2021, p 28.

[77] HoustonKemp, *Regulatory treatment of coal related assets*, 3 November 2023, p 13. AER, *Regulating gas pipelines under uncertainty*, Information paper, November 2021, p 37.

[78] Australian Energy Regulator, *Roma to Brisbane Pipeline Access Arrangement 2022 to 2027 (1 July 2022 to 30 June 2027) | Overview*, Final decision, May 2022, pp 35-37. Australian Energy Regulator, *Roma to Brisbane Pipeline Access Arrangement 2022 to 2027 | Attachment 4 Regulatory depreciation*, Draft decision, November 2021, pp 16-22.

[79] AER, *Evoenergy Access Arrangement 2021 to 2026: Overview*, Final Decision, April 2021, pp 9-11.

[80] AER, *Australian Gas Networks (Victoria & Albury) Gas distribution access arrangement 1 July 2023 to 30 June 2028*, Overview, Final decision, June 2023, p 8.

[81] ERA, *Draft decision on revisions to the access arrangement for the Mid-West and South-West Gas Distribution Systems*, Attachment 6: Depreciation, 24 April 2024, paras 73-74, 98-99.

[82] ERA, *Final decision on proposed revisions to the Dampier to Bunbury Natural Gas Pipeline access arrangement 2021 to 2025*, 1 April 2021, para 1,516-1,520.

[83] ERA, *Final decision on proposed revisions to the Dampier to Bunbury Natural Gas Pipeline access arrangement 2021 to 2025*, 1 April 2021, para 1,524-1,525.

> Notwithstanding this, the ERA considers that the qualifying term of "reasonable opportunity" in the recovery of efficient costs implies that there will be circumstances where the recovery of costs is precluded. That is, it is not entirely clear that the provision for a reasonable opportunity to recover efficient costs necessarily extends to making adjustments to regulated prices to always ensure a service provider is able to recover the costs of sunk investment where technology and competition changes occur in the market for gas transmission at times after an initial investment decision.
>
> In this regard, and with reference to the NGO, the proposal to cap economic life at 2063 may be construed as being contrary to the long term interests of consumers. The reduction in economic lives results in an increase in regulated tariffs with no apparent consumer benefit. **While generally the provision for a service provider to recover the costs of sunk investment may have a long term consumer benefit through supporting incentives for future investment – either in the specific pipeline under consideration or in the pipeline industry more generally – it is difficult to see any such benefit in the circumstances of the DBNGP, which DBP presents as being a declining business.**

However, the ERA has since acknowledged in its 2024 decision for ATCO that accelerating depreciation is a reasonable regulatory tool in the context of the National Gas Law and National Gas Rules:[84]

> The provision of accelerated depreciation is a reasonable regulatory tool to manage the potential for declining levels of future customer demand. Consistent with the National Gas Law (NGL) and National Gas Rules (NGR), the use of accelerated depreciation can support the recovery of efficient costs, support the use of the network over its life and reduce potential price shocks for future customers, however, in the short term prices will increase.

In New Zealand, the NZCC has also addressed the risks associated with the natural gas phase out by shortening the asset lives of gas pipeline businesses by between 16 per cent to 34 per cent, which accelerates depreciation for these businesses.[85] The NZCC considers that shortening asset lives:[86]

- enables depreciation to be recovered over a period that aligns with the length of time network assets are expected, on average, to be economically viable for conveying natural gas;
- allows revenues to reflect more accurately all of the costs of providing the regulated services, which should flow through to more efficient consumer price signals and promote more efficient consumer choices, including discouraging inefficient new connections; and
- maintains expectations of capital recovery and provides incentives for gas pipeline businesses to invest to serve current and future demand.

## A1.2 Electricity networks: ACCC did not recommend a forced write-down of the RAB to address 'gold plating' allegations and affordability concerns

In 2018, there were suggestions that the RABs of electricity distribution networks, particularly those located in Queensland and New South Wales should be written down on the basis that they are overvalued. In particular, the analysis conducted by the Grattan Institute concluded that growth in RAB was excessive, when compared against the aggregate of growth in customer numbers and maximum demand – which it describes jointly as 'usage'.[87]

The Australian government directed the ACCC to hold an inquiry into retail electricity in 2017. The ACCC's final report in July 2018 referred to the Grattan Institute's analysis. While the ACCC identified several shortcomings with the Grattan Institute's estimates of excess RAB growth, it concluded that 'evidence from

[84] ERA, *Draft decision on revisions to the access arrangement for the Mid-West and South-West Gas Distribution Systems*, Attachment 6: Depreciation, 24 April 2024, p iii.

[85] New Zealand Commerce Commission, *Default price-quality paths for gas pipeline businesses from 1 October 2022*, Final reasons paper, 31 May 2022, paras 4.26-4.29.

[86] New Zealand Commerce Commission, *Default price-quality paths for gas pipeline businesses from 1 October 2022*, Final reasons paper, 31 May 2022, paras 6.27, 6.57-6.58.

[87] Grattan Institute, *Down to the wire: a sustainable electricity network for Australia*, March 2018, pp 21-22.

sources such as [the Grattan Institute] or others give a useful starting point for consideration of possible levels of over-investment'.[88]

The ACCC recommended two potential solutions to address its finding that networks had overinvested, namely:[89]

- voluntarily writing down the excess in the RAB for government-owned networks only; or
- a rebate on network charges provided by the relevant state or territory government to end users to compensate end users for the excess in the RAB (but leaving the network to recover the full value on the RAB).

The ACCC also recommended that the regulatory framework be amended to introduce a specific process for addressing stranded assets, how these should be assessed and how their costs should be shared between NSPs and customers.[90]

The ACCC did not recommend a forced write-down of the RAB for privately owned networks. It noted that such write-downs had the potential to introduce significant investment risk that in turn would raise the required rate of return materially:[91]

> Stakeholders have raised concerns that the 'business pays' approach may lead to problems for the broader regulatory regime. **Most obviously, any writedown by governments of the RABs of privately owned businesses would have a significant risk of introducing the perception of sovereign risk by investors in electricity networks (or more broadly) in Australia. They may require a material increase in the rate of return (as calculated by the WACC) as a result.** As noted above, ENA has argued that this would in fact lead to higher overall costs for end-users. The extent of such an increase in the WACC may be more limited if this was seen as a clear one-off event. **However, the ACCC considers that there would be clear regulatory risk introduced by a general writedown.** In any case, the evidence of overinvestment in private networks is not as clear. (emphasis added)

The ACCC considered that these risks were ameliorated in the case of RAB write-downs by government-owned networks, provided that such write-downs were voluntary and clearly a one-off event.[92]

However, no state government subsequently undertook such voluntary RAB write-downs of the networks that they owned.

## A1.3 Electricity networks: National Electricity Rules provide limited scope for asset write-downs

The National Electricity Rules provide limited scope for the AER to remove or write-down assets from transmission network businesses once those assets have been rolled into the RAB, even in circumstances where the utilisation of those assets has fallen. the AER may only make a determination to remove an asset (or group of assets) from the RAB if all of the conditions below are satisfied:[93]

- the asset(s) are dedicated to one user, or a small group of users;
- the asset(s) are valued in excess of $10 million;

[88] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, pp 165-166.

[89] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, pp 166-170.

[90] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, pp 171-172.

[91] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, p 168.

[92] ACCC, *Restoring electricity affordability and Australia's competitive advantage*, Retail electricity pricing inquiry, June 2018, p 168.

[93] NER, clause S6A.2.3(a).

- the asset(s) are no longer contributing to the provision of prescribed network services; and
- the service provider has not adequately sought to manage the risk of the asset(s).

The AER also has the discretion to include a separate amount in the service provider's revenue requirements to compensate the business for the risk of its assets being removed from the RAB under these provisions.[94]

To date, the AER has neither used these provisions to remove assets from the RAB of a service provider nor include an additional revenue allowance to compensate the business for the risk of its assets being removed from the RAB under these provisions.

## A1.4 Telecommunications: ACCC adopted the building block model for Telstra to improve certainty relative to asset revaluations under the previous TSLRIC framework

Prior to 2011, the ACCC set prices for Telstra's fixed line services using a total service long run incremental cost (TSLRIC+) framework.

However, the ACCC switched to a building block model framework in 2011 on the basis that it improves certainty for both the regulated business and its customers, which in turn contributes to the long term interest of consumers:[95]

> A principal advantage of a BBM is that it improves certainty for both the access provider and access seeker relative to the total service long run incremental cost (TSLRIC+) approach which the ACCC used prior to 2011. This enables access provider and access seeker to make efficient decisions regarding their future investment, thereby contributing to the long term interest of end users (LTIE).

The TSLRIC+ framework that the ACCC previously applied to Telstra involved continual revaluations of existing sunk assets, which would be calculated based on optimised replacement cost at each pricing determination:[96]

> In telecommunications, both in Australia and internationally, the forward looking perspective to measuring TSLRIC+ for fixed line services involved continually revaluing the existing sunk assets used in providing these services. This revaluation was based on the asset's optimised replacement cost, and occurred each time a pricing determination was made.

The ACCC considered that such continual revaluations of network assets led to uncertainty regarding the level of access prices.[97]

[94] NER, clause S6A.2.3(b).

[95] ACCC, *Public Inquiry into final access determinations for fixed line services—primary price terms*, Discussion paper, July 2014, p viii.

[96] ACCC, *Public inquiry to make final access determinations for the declared fixed line services*, Discussion paper, April 2011, p 25.

[97] ACCC, *Public inquiry to make final access determinations for the declared fixed line services*, Discussion paper, April 2011, pp 25, 253.

HOUSTONKEMP
Economists

**Sydney**
Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

# Attachment 2: Response to Arcadis report

AECOM

**Summary of Arguments**

| Topic | Arcadis Commentary | Argument |
|---|---|---|
| **Capital Works** | | |
| **Track Reconditioning** | "Insufficient information to justify proposed changes to historic capex and maintenance practices based on increased tonnages.<br><br>Reallocate track conditioning capex from Koomi to Dalby, Dalby to Macalister and Macalister and Columboola to maintenance." | QR developed its capital works program for Track Reconditioning over the DAU3 period assuming a 9.6mtpa tonnage projection. The optioneering for these capital works complied with QR's business case requirement to select the most cost-effective solution that mitigates risk to the operational capacity of the system.<br><br>Track reconditioning is focused on the area west of Toowoomba where the topography is relatively flat. This enables the increased traffic to be moving at speed, which accelerates the rate of deterioration, particularly of the 41kg rail. The light track sections have an increased risk of derailment due to its reduced stability under the projected tonnages.<br><br>The QCA has expressed uncertainty around the proposed coal tonnages projected by QR at 9.6mtpa. The QCA's draft decision on this matter, stated in Summary 9.1[1] of its response to QR's DAU3 submission, is that an approved coal volume be negotiated between QR and its customers.<br><br>Derailment is still too high a risk even with a reduced tonnage projection of 7.5mtpa if current speeds are maintained. The projects are required as planned for any significant load increase.<br><br>Possession times available for track reconditioning will reduce as tonnage and the number of train paths increase, so to provide the track capacity needed by QR's customers, this activity needs to be completed while spare paths are still available.<br><br>Maintenance cost estimates will be revised to match any tonnage agreement reached between QR and its customers. |
| **Re-sleepering** | “The expected increase in tonnage on track sections is not immediately urgent enough to justify moving the capital projects forward in time.<br><br>Reallocate capex costs relating to Macalister and Columboola section to maintenance.” | Re-sleepering involves the efficient renewal of deteriorated timber sleepers. Timber sleepers degrade by environmental factors more than load, so this project is required in all tonnage scenarios.<br><br>It is increasingly difficult to source good quality bush timber for sleeper use and future supply will be at a premium price, as identified in Section 4.1.6.2 of QR’s Discipline Asset Management Plan (DAMP)[2].<br><br>Possession times available for track reconditioning will reduce as tonnage and the number of train paths increase, so to provide the track capacity needed by QR's customers, this activity needs to be completed while spare paths are still available. The cost benefit analysis included in Appendix 2.1 of the Far West Moreton Asset Strategy demonstrates the accelerated delivery of this project as capital is the most cost-effective option for delivery. |

[1] QCA, Queensland Rail 2025 Draft Access Undertaking, Draft decision, June 2024
[2] MD-15-182 Track and Civil Discipline Asset Management Plan, March 2024

| Topic | Arcadis Commentary | Argument |
|---|---|---|
| **Bridge Pier Replacement** | "Insufficient evidence to justify replacement of timber piers with concrete.<br>Replace only very poor condition elements with a capital program (62% of the claim). Deal with the remaining elements in an ongoing predictive maintenance program." | Timber was used for bridging when there was a ready supply of cheap bush materials and labour, and it was easier to build timber bridges than high earth embankments. Traffic tasks were low, and loadings were at a maximum 15.75 TAL. All SEQ rail bridges now have a load capacity of 20 TAL.<br>The timber used by the West Moreton timber bridges is now increasingly difficult to obtain, and repair requires skilled labour that is increasingly difficult to source.<br>The most cost-effective approach to mitigating the risk of failure of the timber piers is to replace them with concrete piers, which also adds structural strength and service life.<br>Bridge pier replacements enable an increased service capacity and axle loads while managing the risks to underground timber. There are several risks associated with the integrity of timber bridges, including (sourced from the DAMP):<br>• Termites and borers, including marine varieties<br>• Fire damage<br>• Various timber decays including rot, fungus, honeycomb, doze and piping which is not always visible.<br>QR has included high risk piers only in its capital works proposal, and notes that the consequence of a failure would range from load and / or speed restrictions to track closure while repairs are undertaken. The nature of the work required means that extended track closure periods may be required, which may have a significant impact on mine production. |
| **Overhead Allocation** | | |
| **Corporate Overhead** | "Unable to ascertain reasonableness with current information. Discussion of 'revised allocator' included in QR DAU3, without provided methodology." | The allocation of corporate overhead costs to the West Moreton System for DAU3 is based on:<br>• Principles defined in QR's Cost Manual, which has previously been approved by the QCA.<br>• An amendment to the Cost Manual, also approved by the QCA in 2021, that provides for 'items in Table C.1 [to be] recalculated on a rolling 3 year basis and reported in QR's annual financial report'.<br>• A formula used to derive the West Moreton System corporate overhead allocator, which complies with the QR Costing Manual.<br>• The use of FY22 actuals as the base year from which to calculate the allocation, which is consistent with the approach used and accepted in prior Submissions.<br>• Cost escalation using a factor of 1.16, which is in line with the target CPI rates as stated in the most current RBA Cost Index tables.<br>We have reviewed the Costing Model and concluded that it correctly applies the principles. |

| Topic | Arcadis Commentary | Argument |
|---|---|---|
| **Maintenance** | | |
| **Repairs** | "In light of all rail replacement in the capital works, Arcadis assess that this amount is too high and that the budget be reduced for these works." | Rail 'repair' includes replacement or refurbishment of sections of track, which enables some maintenance costs to be avoided for the next several years.<br><br>The 'Repairs' category of maintenance also includes several tasks that will continue to be carried out regardless of rail replacement, including issues such as wheel burn, defective welds, internal rail defects, broken bolts, rail distribution, unloading and flagging, as well as the regular examinations of the line that QR is required to undertake by regulation.<br><br>Analysis of the cost of these activities indicates that the cost of Repairs can be expected to reduce by about 30% after the capital works have been completed (the remaining 70% covers tasks that must continue). This conclusion has been used and applied in QR's DAU3 Maintenance submission.<br><br>A summary of this assessment and the cost breakdown should be sufficient to respond to Arcadis' comments on this topic. |
| **Renewals** | "Insufficient information to understand renewals. Structural renewals are not included in this amount and may be missing in maintenance expenditure." | Renewal activities involve the replacement of components or minor assets on a like for like basis. Our review of work order descriptions confirms that the works categorised as 'Renewals' are aligned to this definition.<br><br>Structural renewals are in fact included in these maintenance costs and are the largest portion of the total Renewals cost.<br><br>Structural renewal associated with telecoms and signalling is not included in this category (it has its own specific cost category).<br><br>Renewal of bridge components is included in the 'Other' category, but these costs are not material. These costs will be avoided if the capital works proceed as planned but would otherwise continue as a maintenance cost. |
| **Turnout maintenance** | "This figure appears low. We would expect that turnout maintenance would be higher due to their high maintenance requirements. These costs may be embedded elsewhere in maintenance. We do not deem these reasonable as these costs are lower than expected. Insufficient information to provide estimate." | Turnout maintenance costs include fixed and variable cost items. Variable turnout maintenance costs have been included in the 'Other' cost category.<br><br>Arcadis's assessment of these costs being '*too low*' may indicate that they only identified the fixed portion of turnout maintenance costs ($1.06 million in $FY24).<br><br>When considering both variable and fixed portions of this category, the total turnout maintenance cost over the DAU3 period is $5.57 million ($FY24).<br><br>QR's response should identify both elements of these costs. |

| Topic | Arcadis Commentary | Argument |
|---|---|---|
| **Lubrication** | "We would expect higher lubrication costs, particularly as tonnage increases. Deem this as not reasonable." | Lubrication is considered to be primarily a variable cost for all track related activities, as noted in the DAU2 submission[3] which was accepted by the QCA. 50% of lubrication costs are treated as variable and will therefore increase in proportion to tonnage increases.<br>The same assumptions have been made in DAU3, and a similar methodology has been used for all maintenance categories.<br>The response should detail these assumptions and the process followed.<br>We note that there is an error in Section 6.1.8 of the Maintenance submission, which gives a total figure of [redacted]. This should be adjusted to [redacted]. |
| **Other maintenance costs** | "Due to insufficient information, we are unable to deem this as reasonable. Considering the topology such as black soil, Arcadis has partially assessed this as reasonable. However, Arcadis requests further clarification on this item." | Other maintenance activities include a collection of several activities considered both variable and fixed, all being low-cost. The variable activities which contribute to the 'Other maintenance' category include:<br>• Lubrication, which manages the wheel rail interface and extending the life of the rail by reducing rail wear plus reducing noise where required.<br>• Rail Grinding, which extends the life of the rail by reducing rail wear by optimising wheel rail interface.<br>• Turnout Maintenance, where damage and wear of turnout switchblades is one of the most common component replacement requirements. Maintaining emergency spares of switchblades and other common turnout componentry is a high priority. Trailable facing points equipment on turnouts west of Willowburn also require ongoing component refurbishment.<br>• Mechanised Re-sleepering, where cyclic timber re-sleepering is required before replacement of timber sleepers with concrete following future reconditioning programs. High levels of reactive maintenance, and imposition of speed restrictions are required as defective timber rates approach engineering track standards limits. Cyclic mechanised re-sleepering is the best approach to managing defective sleepers.<br>Fixed activities contributing to the 'Other maintenance' category include Legislative compliance, Carpentry, Top and Line Spot Resurfacing, Security, Audits/Investigation, Plumbing, Vandalism Management, Cleaning, Signage Management, Graffiti Management, Track Geometry Recording, Support, Installation, Flood & Natural Disaster Repair, Project Management, Formation Repairs, Disposal, Painting, 3rd Party Damage Repairs, Rollingstock Support, Construction, Calibration/Testing, Maintenance Ballasting, Property Management, Pest Control, Commissioning, Design, Mechanised Resurfacing, Monitoring Systems and Performance, Estimates, Scheduling, Derailments, Refurbishment and Overhaul.<br>This category does not include Signalling and Telecommunication maintenance activities, which are reflected in their own cost category. |

[3] Draft Access Undertaking 2 (DAU2), Explanatory Document, August 2018

| Topic | Arcadis Commentary | Argument |
|---|---|---|
| **Delivery** | | |
| Delivery Constraints | “A capex program of $346.9m over five years may be difficult to achieve, should labour constraints and internal approval processes hinder the process.” | QR has responded to the risk of delivery in its DAU3 capital program in Section 11 of its DAU3 Capital submission[4] where several strategies for procurement are highlighted across each capital project. In addition to these statements, QR is reallocating internal resources to the South-East Queensland region.<br>QR retains access to contractors as necessary and ensures that all contracted work is done so in accordance with its 'Our Supplier Code of Conduct' and relevant work, health and safety supplier policies.<br>QR considers delivery approaches in all of its business cases and reduces delivery risk by assessing critical issues related to project delivery at the planning phase.<br>AECOM's engineering review[5] has further validated this process having assessed several business cases for QR's capital projects.<br>QR’s approval processes ensure that approval is received prior to the scheduled start date of capital projects. Several projects proposed in the DAU3 period have their approval process underway to ensure timely approval. |

Mike Stoke (Technical Director – Infrastructure Advisory)
Signature

[4] DAU3 Capital Expenditure Submission, West Moreton
[5] AECOM, Engineering Review of QR DAU3 Capital Submission, November 2023