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Queensland Rail's proposed Reference Tariff Reset

New Hope Corporation submission

New Hope is the largest coal producer in Queensland Rail's Western System. New Hope is pursuing growth opportunities across its portfolio and seeks regulatory arrangements which promote efficient supply chain performance, reasonable, competitive and predictable charges for use of the infrastructure, and a practical pathway to expansion.

1. Western System reference tariff derivation:

Reference tariffs in the Western System have, until now, emerged from processes involving the determination of the Access Undertakings of QR Network and its predecessors. Each of these processes failed to establish a transparent and repeatable methodology for the derivation of reference tariffs in the Western System.

The original access pricing for Western System coal producers is understood to have been derived in the late 1990's based on a nominal split of the negotiated integrated haulage charges into above rail and below rail components. The below rail portion was understood to be an amount equivalent to recovering the coal traffic's share of recurrent costs and incremental capital, but not a return on sunk capital.

It is our understanding that the reference tariffs currently in place had their origins in a draft decision of the Authority (December 2009) regarding QR Network's 2009 DAU. That draft decision set out the draft views of the Authority on a methodology for the development of Western System reference tariffs. As QR Network subsequently withdrew its 2009 DAU, a final decision was never required. In the 2010 DAU, QR Network rejected the Authority's approach to setting Western System tariffs, but accepted a tariff which was consistent with the 2009 draft decision, which was then approved. The result was that the methodology was never finally established. Despite this, Queensland Rail has based much of its proposal on the draft decision of December 2009.

New Hope welcomes the proposal to establish a transparent and repeatable methodology. However, given that previous consultation processes were incomplete, it is important that the proposed methodology be fully assessed on its merits. Further, New Hope considers that the methodology proposed by Queensland Rail is appropriate for calculating a ceiling price only. The decision of where to set tariffs (i.e. at the ceiling or at a discount to the ceiling) requires careful consideration of matters such as the impacts of pricing on the competitiveness of customers, and the reasonableness of the tariff given the quality of service provided.

2. QCA's criteria for evaluating tariff proposals

In forming a judgement on the actual tariffs (as opposed to the ceiling price), the QCA's recently finalised Statement of Regulatory Pricing Principles[1] established criteria for the evaluation of regulated tariffs, revolving around three primary concepts:

- Economic efficiency: Are the pricing arrangements consistent with achieving economic efficiency?
- Fairness: Are prices consistent with reasonable expectations formed from prior transactions and is there proportionality in the treatment of different users? If a subsidy is applicable, is the rationale well developed?
- Regulatory governance and practice: Are the processes for establishing prices transparent and are changes in prices predictable?

We consider that these criteria provide a strong analytical basis for the assessment of the Western System reference tariffs, and as a result Section 2 of this submission is structured around these three key elements.

2.1. Efficiency criteria – is the proposed tariff efficient?

In its Statement of Regulatory Pricing Principles, the QCA identified that the primary consideration in evaluating whether a specific pricing proposal or structure is justified from a public policy perspective is whether it is clearly consistent with increasing overall economic efficiency (comprehensively defined) on a net present value basis.

Efficiency in this respect includes:

- *allocative efficiency*: this essentially requires allocating scarce resources to their most highly valued uses. Allocative efficiency is dependent on output being produced at a level consistent with price being equal to short-run marginal cost.
- *productive efficiency*: which requires that output is produced at minimum cost.
- *dynamic efficiency*: this encompasses the intertemporal aspects of efficiency including the timely and profitable introduction of new processes, systems and services.

New Hope acknowledges that these concepts of efficiency must be considered in combination with the required pricing principles as set out in in section 168A of the QCA Act, which requires that prices:

- 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;
- allow for multi-part pricing and price discrimination when it aids efficiency;

[1] QCA – Statement of Regulatory Pricing Principles, August 2013

- 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 the access provider, except to the extent the cost of providing access to other operators is higher; and
- provide incentives to reduce costs or otherwise improve productivity.[2]

In the context of the Western System, New Hope believes that there is an important distinction between the investments that Queensland Rail has made, and will continue to make, to enable the operation of coal services in the Western System, and the DORC value attributed to infrastructure assets that existed prior to the commencement of coal services in the Western System. Recognising that these assets had previously been written down to a scrap valuation, recovery of the DORC valuation on these assets is clearly not required from a 'revenue sufficiency' perspective.

The extent to which Queensland Rail is seeking to include recovery of the DORC valuation of pre-existing assets into its prices is making the Western System highly uncompetitive when compared to other coal supply chains in Queensland and NSW. As a result, New Hope considers that Queensland Rail's proposed tariffs will not promote overall economic efficiency.

Levying a tariff at the proposed level will not meet the objectives of Section 138 of the QCA Act, for the reasons set out in Section 5 (Conclusion).

New Hope considers that setting a reasonable and efficient tariff will require some combination of:

- Revising/correcting certain elements which lead to the high ceiling price, e.g. the excessive operating and maintenance costs; and.
- Recognition that the tariff must support a sustainable capacity to pay, on the part of coal producers. This should be addressed by:
    - Recognising that the value of the RAB must be reduced from the theoretic DORC value (i.e. the asset value arising from the theoretic DORC approach cannot be sustained and must be impaired) AND/OR
    - If required to ensure a reasonable tariff, charging tariffs which are below a ceiling price, perhaps in conjunction with a 'loss capitalisation' approach (as is adopted by ARTC in Zone 3 in NSW, which results in a charge per '000 gtk of around $7).

Section 3 below sets out New Hope's concerns regarding the elements which contribute to Queensland Rail's estimation of the proposed $22.22/'000 gtk tariff.

2.2. Fairness criteria - is the proposed tariff reasonable?

In its Statement of Regulatory Pricing Principles, the QCA has proposed that a central concept in considering the fairness of tariffs is the 'reference transaction'. It has emphasised the need to establish a reasonable reference transaction to determine what all parties to the transaction would regard as fair from an ex ante perspective. The ex-ante perspective effectively requires addressing the

[2] Section 168A of the QCA Act

question of what principles all parties to a transaction would have agreed to before they made any sunk investments.[3]

New Hope acknowledges that establishing a reasonable reference transaction in respect of the West Moreton system coal tariffs is not straightforward for a number of reasons, including:

- Rates that were negotiated prior to making sunk investments in mine and rail infrastructure often related to an integrated haulage service, with no transparency on the specific access charge component; and
- Rates were not negotiated at a single point in time.

However, notwithstanding these difficulties, New Hope considers that there are number of principles that underpin our view on the reference transaction that would have applied prior to the investment in sunk mine and rail infrastructure:

- Both parties would have expected that the tariff would have covered all incremental operating and maintenance costs associated with coal traffics, plus a reasonable usage based allocation of fixed operating and maintenance costs;
- Both parties would have expected that the tariff would have covered all incremental capital expenditure that was required to be spent on the railway – indeed, most of the incremental capital expenditure was contributed upfront by the users, with rebates provided to the extent that this expenditure is also included in the tariff;
- Importantly, neither party would have expected that Queensland Rail would recover the full DORC value of its pre-existing assets. In fact, we are aware that, in 1995, QR (as it was then known) valued its Western System rail infrastructure at a scrap valuation. We do acknowledge that Queensland Rail would likely have anticipated an increase in profitability as a result of the introduction of coal traffic, and as a result of subsequent volume increases. In a regulatory sense, this would be viewed as making some contribution to the value of pre-existing assets. However, the primary determinant of the tariffs would have been the need to ensure that the Western System supply chain remained competitive with the supply chains available to alternate mine developments. To the extent that Queensland Rail could remain competitive with other systems, it would have the opportunity to achieve a return on its pre-existing written down assets.

New Hope believes that it is critical to acknowledge that, recognising the poor below rail service quality, the need for the Western System to be competitive with other systems and the need for tariffs to be sustainable for users, it was never anticipated that tariffs would be set at a level that provided for full recovery of the DORC value of pre-existing assets.

Given this, New Hope's overriding concern is the quantum of the tariff, which we consider far exceeds any reasonable view of the applicable reference transaction and must therefore be reduced regardless of the views of the Authority on the appropriate ceiling price.

We have considered the fairness of the proposed tariff from the following perspectives:

[3] QCA Statement of Regulatory Pricing Principles, August 2013, p 27-28

- Have the increases been reasonable over time?
- Are the tariffs competitive with other systems?
- Is competitiveness further impacted by the below rail service impacting above-rail costs?
- Are the tariffs sustainable for customers?

2.2.1. Have the increases been reasonable over time?

Western System tariffs have increased as follows:

- 2005 draft decision $8.50/'000 gtk.
- 2006 decision $10.50/'000 gtk.
- 2010 decision $16.81/'000 gtk.
- 2013 QR claim $22.22/'000 gtk.

The notional $22.22 per thousand gross tonne kilometres is proposed by QR to be split into a two part tariff of $11.11 per thousand gross tonne kilometres plus a per train path tariff of $5,449.78. When the two part tariff is calculated it results in an access charge of $10.13 per tonne. The $10.13 per tonne is actually equivalent to a single tariff of $24.60 per thousand gross tonne kilometres. The tariff is now proposed to increase to a level 2.9 times that of the 2005 draft decision level which was a single gtk based tariff, only eight years ago. Given that CPI has risen approximately 25% over this period, it is difficult to understand how such large increases can be justified in the context of the lower WACC which applies under current market conditions, a depreciating asset base and substantial volume increases (which have required only limited capital expenditure). Rather, it is clear that the major driver of the increasing tariff is Queensland Rail's escalating demands for recovery of the DORC value of its pre-1995 assets:

- In 1995, QR placed a scrap value on its rail infrastructure assets in the Western System – given an estimated scrap value of $10,000/km, this would translate to a valuation of just over $2 million from Rosewood to Macalister;
- The value placed on pre-1995 assets in the 2005 and 2006 decisions was not identified, however, the Authority's 2005 final decision[4] referred to a benchmark DORC value for the Western System of $1.5m/km, 70% life expired, which would translate to around $95 million from Rosewood to Macalister;
- The Authority's 2010 decision reflected Everything Infrastructure's valuation of pre-1995 assets of $177.1 million (August 1997 $'s);
- Queensland Rail's 2013 proposal includes a value for pre-1995 assets of $248.1 million (August 1997 $'s) for Rosewood to Columboola.

[4] QCA's Final Decision on QR's 2005 Draft Amending Undertaking, December 2005, p75

New Hope considers that this massively increasing expectation for recovery of pre-1995 assets is completely at odds with the 'reference transaction' applicable prior to sunk investment being made in mine and rail infrastructure.

2.2.2. Are the tariffs competitive with other systems?

When considering the reasonable expectations about the extent of recovery of the DORC valuation of pre-1995 assets, it is instructive to consider how Western System tariffs compare to the tariffs paid in other coal systems. This comparison is important, given that the 'reference transaction' was established prior to sunk investment in mine and rail infrastructure. At the time it would have been essential for the Western System to provide a cost competitive haulage service when compared against the options available for mine developments in other systems. There is a continuing need for Western System mines to remain competitive with mines located in other coal systems.

The Authority recognised this in its July 2005 draft decision, where it concluded that the tariffs paid in other Queensland coal systems were an appropriate benchmark for Western System reference tariffs, and recommended a tariff for the Western System equivalent to the Moura system (the most expensive of the central Queensland systems at the time).

The table below demonstrates the extreme extent to which the proposed Western System tariff is now out of step with below rail tariffs in other systems. The potential to distort the competitive position of coal mines is clear from this table alone. Note however that this table excludes the impact on the competitive position which arises from high above-rail costs in the Western System, which are a further consequence of the inferior below rail service.

Figure 1. Comparisons of below rail costs

Year Tariffs apply to Selected Coal System	2013 Tariffs	2013	2006 Tariffs	2006	Increase 2006 - 2013	Proportion Coal Type
Selected Systems	$/'000 gtk	Indicative $/net tonne	$/'000 gtk	Indicative $/net tonne	Indicative % Increase	Metcoal/Thermal Coal %
QR West Moreton	**24.6***	**10.13**	10.5	4.3	134%	0/100
Blackwater AT1-4	~9	3.8	~5	2.3	65%	64/36
Goonyella AT1-4	~7	2.4	~5	1.7	41%	88/12
Moura	~9	2.8	~8	2.5	12%	28/72
Gunnedah (Zone 3), NSW	7.2	5	Not available	Not available	Not available	15/85
Hunter Valley (Zone 1), NSW	~10	1.5	~7	1	50%	15/85

*Note that the two part tariff is equivalent to $24.60 which exceeds the notional $22.22 headline tariff

The tariff proposed by Queensland Rail (shown in red) is clearly out of step with other systems, being more than double the next most expensive system in $ per '000 gtk terms. The Goonyella Abbot Point Extension has been excluded from this analysis on the basis that it is a green-field railway construction in the ramp-up phase. The proposed increase in tariff is the highest in percentage terms by far and is more than double the percentage increase of the Blackwater and Goonyella systems which have experienced significant investment between 2006 and 2013. It could be argued that the investment in Moura and West Moreton systems has been the most similar over this period.

In each of these other systems, coal trains are able to run virtually 24 hours per day and to carry payloads of at least 6,000 tonnes and in some cases in excess of 10,000 tonnes. Queensland Rail's proposal is to charge 2-3 times the average tariff of other systems, while providing a vastly inferior service.

Interestingly, in the case of the Gunnedah system in New South Wales, the tariff of approximately $7.20/'000/Gtk is a result of ARTC voluntarily deferring returns (through a 'loss capitalisation' mechanism), based on considerations of capacity to pay. This is despite the superior service offered in this system, with train payloads of 6,000t compared to 1,940t in West Moreton, and with 24 hour operation. In this case, Queensland Rail's proposal is to charge more than triple the tariff which ARTC considers is the maximum which its customers can bear, while providing a service which also results in significantly higher above rail costs. New Hope does not consider this proposal to be remotely reasonable. In a competitive sense, the access tariff should be well below $7.20/'000/Gtk to compensate for the below rail service quality impacts on above rail costs. In order for below rail charges to be equivalent to the highest charges in other rail systems, the Western System tariff would need to reduce by at least $5.00/tonne. However, when the additional costs imposed on rail operations as a result of the poor below rail service standards are taken into account, for Western System rail costs to be equivalent to other systems, the access charge would need to be no more than $2/tonne to be competitive with the next highest rail cost corridor (Upper Hunter/Gunnedah).

The following section discusses the impacts of the poor below-rail service quality in the West Moreton system on above-rail costs.

2.2.3. Is competitiveness further impacted by the below rail service impacting above-rail costs?

Attachment A, which is confidential, provides indicative ranges of above-rail costs compared to Western System mines. [redacted] This is highly significant in the market for thermal coal having a moderate price level, as outlined in Section 2.2.4.

The causes of the above-rail cost disadvantage all relate to the below rail service offering. The causes are:

- **Low system volumes, caused by lack of below rail capacity:**

  Railways have enormous scale economies. In the case of the Western System, scale is limited by government endorsed restrictions on rail capacity allocated to coal and legislatively imposed restrictions including passenger priority legislation. Low volumes in the Western System result in higher unit costs of rail services due to loss of economies of scale, and a lack of competition resulting from insufficient scale to sustain more than one operator. This lack of scale also restricts the ability of mines to produce at an optimal mining operation scale, further impacting on unit costs of coal production and hence competitiveness.

- **Restricted operating hours:**

  The primacy of the passenger traffic in South-East Queensland results in an inability to run trains for 24 hours per day, because of the non-passenger train movement restrictions during the passenger peak and shoulder peak periods. Even outside of peaks, Queensland Rail proposes to operate a 15 minute frequency of passenger trains on a broader scale.

  Beyond this, in recent years Queensland Rail has introduced regular 48 hour closures of segments of the metropolitan system to optimise its maintenance approach given the demands of

passenger traffic. These 48 hour closures disproportionately impact coal services, which rely on weekend running to meet service requirements and need to transverse multiple 'passenger segments'.

The 'blackout' periods and severe shoulder peak restrictions lead to scheduling disruptions for train crew and loss of train movement efficiency. These restrictions impact on the train crew hours required to operate train services as well as the size of the fleet required.

- **Short train lengths and low axle loads limit payloads:**

  The historical limitations of a rail network predominantly built for non-coal traffic result in restrictions to maximum train lengths (crossing loop length) and total axle loads (15.75t), resulting in inefficient payloads of 1,940t. This is very low when compared to 8,200 - 10,000t payloads in Central Queensland and 6,500 to 9,200t payloads in Hunter Valley.

- **Operational limitations:**

  Operational limitations are a constant feature of the Western System due to old and inadequate system design. This results in:

  - Frequent maintenance closures and consequential loss of throughput.
  - Frequent speed restrictions.
  - Inability to use modern AC drive locomotives primarily because of axle load and size restrictions. AC drive locomotives are technically more efficient due to higher adhesion levels, i.e. for the same locomotive weight, an AC drive locomotive can typically haul 50% more wagons per locomotive.

- **Prevention of effective above rail competition perpetuating the use of out-dated rollingstock:**

  The nature of the below rail infrastructure, including the 15.75 tonne axle load limit, represents a barrier to entry and reduces the feasibility of above-rail competition. New 15.75 TAL locomotives are generally required to be custom designed and manufactured in low volumes and consequently are more expensive. In contrast with the other rail systems where above rail competition is vigorous, the below rail infrastructure constraints mean that producers have very limited options for encouraging competition in the above rail market.

  If the below rail service offering facilitated more above rail competition, we believe that new above rail operators would be more likely to invest and install heavier, longer and faster rolling stock. Additional costs of using the existing rollingstock include:

  - Lower tonnage throughput for the same number of train services and hence lower operator revenue opportunity;
  - Existing life expired locomotives are 30 to 40 years old with a fuel burn around 20-25% greater than the modern diesel engine technology.
  - Lower tractive effort locomotives constrain the maximum payload for two locomotives to less than 2000 tonnes per train consist.

- Lower horsepower impacts the cycle time through lower average speed and therefore also increases crewing costs.
- High maintenance costs due to more frequent servicing and unplanned maintenance of older rolling stock.
- Increased spare part costs are incurred because of low volume manufacturing of out of date spare parts and redesign costs for spare parts substitution.

2.2.4. Are the proposed tariffs sustainable for customers? [redacted]

Thermal coal is a global commodity and Australian producers are competing in Asia against coals produced in the Atlantic (Colombia/USA/ South Africa) and Pacific rims (Indonesia/Russia). Coal producers in the Western System are also competing with producers from NSW and Queensland. Commodities are highly substitutable and therefore the major point of competition for thermal coal is the delivered price.

[redacted]

It is also important to note that 100% of coal being transported on the Western System is thermal coal whereas other rail systems in Queensland are carrying predominantly metallurgical coal (e.g. Goonyella system), or at least a much lower percentage of thermal coal. FOB prices received for low ash thermal coal are significantly lower on average than for metallurgical coal. From Japanese Fiscal Year 2000 to 2013, the USD FOB price for low ash thermal coal sold in Japan was on average only 50-55% of the hard coking coal price over the same period.

[redacted]

When compared against the volatile thermal coal price, and given the level of price competition in coal markets, consistent increases in rail costs from an already high level will not be matched over a sustained period by the coal price. This leads to significant margin erosion for coal producers utilising the Western System. Coal producers using the Western System are also producing thermal coal only, yet are paying the highest tariffs.

In addition the high increase in above rail charges over the period in question brings into focus two issues:

- the lack of competition and the impacts of the below rail service, as discussed in Section 2.2.3; and
- the likelihood that QR's initial split of the integrated rail haulage rates into to above and below rail allocated an insufficient amount to above rail. The effect of this is that the allocated above rail rate did not reflect the true costs of the haulage service and once haulage rates were renegotiated, the rail operator sought a rate that did in fact reflect the full costs of this service. The corollary of this is that the initial split of rates allocated an excessive amount to below rail, which was then treated as providing a contribution towards value of pre-existing infrastructure assets.

The high increase in above rail charges reinforces New Hope's concerns that Queensland Rail's demands for recovery of the DORC value of pre-existing infrastructure assets is completely inconsistent with the 'reference transaction' that was established prior to investment in the mine.

2.2.5. Fairness of proposed tariff: Conclusion.

New Hope submits that the tariff proposed by Queensland Rail does not meet the fairness criterion as it far exceeds any reasonable view of the appropriate 'reference transaction' given that:

- Increases over time have been excessive and have, in large part, been driven by Queensland Rail's escalating demands for recovery of a DORC value of pre-1995 assets.
- The proposed tariff is at least double that of other coal systems which offer vastly superior below rail service.
- The below rail service quality in this system has severe impacts on above rail costs and maintains a barrier to entry for new operators.
- Customers cannot remain competitive while dealing with both unsustainably high below rail charges and an inferior below rail service offering that contributes to overall higher haulage charges.

2.3. Regulatory governance and practice criteria – achieving transparency and predictability in tariff reviews

New Hope considers it essential to establish a transparent and repeatable methodology for determining reference tariffs for the Western System. We believe that this will enable greater predictability of tariffs, and hence improved understanding and management of the associated cost risk.

However, contrary to the apparent view of Queensland Rail, we do not consider that a transparent and repeatable methodology for assessing reference tariffs should automatically mean that tariffs are set at the price ceiling. Instead, the primary objective is to establish what is the reasonable level of tariffs, taking account of the efficiency and fairness pricing criteria, and then to specify a framework for repeating this process into the future.

This may well result in a methodology that involves:

1. A building block assessment of the ceiling price; and

2. A specified methodology or factors for adjusting this ceiling price to derive the reference tariffs.

In this context, New Hope provides, in Section 4 of this submission, detailed comments on each of the elements (building blocks) which lead to the proposed tariff. Those sections will explain why, in our view, the ceiling price should be lower than the notional $22.22 per '000 gtk (equivalent tariff of $24.6 compared to the two part tariff). Our main concerns, as detailed in Section 4, are that:

- The DORC value of the assets is excessive, given the actual condition of the infrastructure (and resulting high maintenance and ongoing sustaining capital expenditure requirements) together with the poor below rail service levels available using this infrastructure; and

The forward looking operating and maintenance costs, and capital expenditure, all appear to be far higher than would be expected from an efficient service provider.

3. Queensland Rail's Methodology

This section provides comments on Section 3 of Queensland Rail's submission, adopting the same numbering and headings.

3.1. Building Blocks approach

The building block approach is considered reasonable in establishing a ceiling price level, subject to New Hope's concerns regarding the overstatement of the value of the pre-existing rail infrastructure. These concerns are discussed in Section 4 in relation to the opening asset value.

3.2. Inclusion of Macalister to Columboola

New Hope has no reason to object to Macalister to Columboola being included. Without access to transparent information we will rely on the QCA determining a fair and equitable allocation of common and other costs.

3.3. Brisbane Metropolitan Region

Queensland Rail has proposed to apply the building blocks based tariff derived for Rosewood to Columboola to the distance travelled through metropolitan system. There is no justification provided for this apart from that calculation of a ceiling price would be complex and would be likely to be higher than for Rosewood to Columboola.

In the Brisbane Metropolitan Region the passenger rail services are the prime user and infrastructure is optimised for that user. Coal and other freight traffics are incremental users who receive lower service levels from the infrastructure manager.

New Hope considers that there is no case whatsoever for additional costs incurred on the Rosewood to Columboola section to result in increased charges through the metropolitan region.

Rather, in the absence of clear cost based information on the floor and ceiling price for this region, consideration of the parties expectations reflected in the 'reference transaction' become even more important. Other freight services pay much lower tariffs through the metropolitan system. It would seem fair and equitable that all freight services pay a similar level tariff in the suburban network.

3.4. Train Path Allocation Percentage

3.4.1. General Application

The general approach to determining train path allocation percentages appears reasonable based on the information presented by Queensland Rail. However, it should be noted that the number of contracted train paths for non-coal services is not the only factor that constrains the capacity that can be contracted by coal users. In particular:

- Queensland Rail is legislatively bound to preserve a certain number of paths for non-coal freight services - even if all of these paths are not currently contracted to non-coal freight services, they remain unavailable to coal services;
- We anticipate that, under the Transport Services Contract, the Queensland Government may require that Queensland Rail create or maintain capacity specifically for non-coal freight services. A case in point is the two additional passing loops and tunnel works currently being funded by the Queensland Government to increase the number of non-coal trains. Again, even if all of these paths are not currently contracted to non-coal freight services, this capacity is not going to be available for contracting for coal services.

As a result, New Hope believes that, for the purposes of determining the train path allocation percentages, the paths 'committed' to non-coal freight services should be the greater of:

- Paths contracted for non-coal freight services;
- Paths preserved for use by non-coal freight services; and
- Paths that the Queensland Government otherwise requires be made available to non-coal freight services.

Using this approach, the additional capacity being developed for non-coal services via the Queensland Government's funding of passing loops and tunnel works will lead to a lower share of paths allocated to coal. The Authority will be able to seek information from Queensland Rail on the exact increase in available non-coal freight paths from this investment, but New Hope estimates that this could reduce the percentage of Rosewood to Macalister train paths allocated to coal services to closer to 50%.

3.4.2. Reduction for Brisbane Metropolitan Regional Peak

The approach adopted by Queensland Rail does not fully account for the capacity impacts of the metropolitan peak on the assets from Rosewood to Macalister to Columboola. It neither accounts for the build-up and wind-down of public timetabled services for the peak period nor the non-revenue passenger services being positioned in readiness for the peak or being returned after the peak. The central stabling or parking area for passenger trains in South-east Queensland is at Mayne yard, between Bowen Hills and Windsor. In the early mornings, trains start leaving Mayne at around 4:30 am to provide for the build-up of services in the outer areas of the network. This is because there is

limited stabling or parking of trains in outer areas. After the morning peak, peak capacity trains return to Mayne for stabling by around 10am. Similarly in the afternoon, trains leave Mayne from around 2pm in preparation for the evening peak. At night, trains return to Mayne progressively after the peak.

The actual impact on coal train paths includes the consequential congestion related impacts of trains sitting waiting paths in passing loops. The most significant impacts relate to the Ipswich, Gold Coast and Cleveland Lines due to junction and track occupancy conflicts. The Cleveland line has very limited stabling so it is significantly affected by the build-up and wind-down of peak services and implementation of 15 minute off-peak services early in 2014.

Timetabled peak services build up from 5:23am onwards at Park Road and finish at 9:14 am. At Rosewood morning peak services build up from 4:45 am and continue until 8:05 am. At Corinda junction, peak services commence building up at 5:20 am and return to normal at 8:58 am. Gold Coast peak is spread between 5:08 am and 09:26 am between Park Road and Yeerongpilly. These times are the public timetable times which would exclude the positioning of non-revenue passenger services from stabling at Mayne as mentioned above.

The ability to run counter peak services is constrained by the build-up of services for the peak direction and subsequent wind-down following the peak. This is due to the major stabling being at Mayne instead of the end of the Cleveland Line for example. While we can argue that coal services are significantly restricted during the 5.5 hour build-up, peak and wind-down period, it is accepted some services still operate albeit in a constrained manner. Consequently, it is estimated that the equivalent real morning peak curfew is reduced from 5.5 hours to close to 4 hours rather than the 2.5 suggested by Queensland Rail.

The afternoon peak is longer due to the spread of hours for school finish and worker finish times. Peak services operate through Corinda between 2:56pm and 6:56pm. Given the build-up and wind-down of services, this period is likely to be around 6 hours. Again, accounting for some limited coal paths in this period, would suggest that there is the equivalent of a peak afternoon/evening curfew of at least 4 hours instead of the 3.5 suggested by Queensland Rail.

Should 8 hours be adopted as the minimum estimate of the "curfew" impact, then:
8 hours unavailability * 5 days per week/ 24 hours * 7 days = 23.81% or rounded up, 24%.

We believe that this 24% loss of capacity is a conservative estimate of the impact of passenger service commitments, as it doesn't account for the increase in timetabled passenger services since the last undertaking. The additional trains are understood to be almost exclusively stabled at Mayne, further impacting the counter-peak and peak directions.

In addition to the capacity losses resulting from passenger peak periods, in recent years, Queensland Rail has implemented a maintenance regime that further erodes the capacity available to coal services. In particular, Queensland Rail has implemented 48 hour weekend closures on segments of the passenger network. This practice has a particularly onerous impact on the capacity availability for coal services, given the reliance on off peak periods (including weekends) to achieve throughput, and the fact that the coal services need to traverse multiple passenger segments, including Ipswich, Gold Coast and Cleveland lines, all of which will be subject to different 48 hour closure periods. This maintenance possession regime is driven primarily by the service standard expectations for passenger services.

Assuming that coal services are prevented from operating due to 48 hour maintenance closures once per month, this creates additional capacity unavailability caused by the metropolitan region as follows:

48 hours unavailability/24 hours * 7 days * 4 weeks = 7.14%, or rounded down, 7%. It is however understood that recent 48 hour closure frequency has been twice per month on the Ipswich/Rosewood Line, once per month on the Cleveland Line and one or two closures per month on the Beenleigh Line. This suggests the 7% estimate is conservative given that any one of three lines having a closure impacts coal services.

In total, the capacity unavailability for coal services from the metropolitan region is conservatively estimated to be in the order of 31%, as compared to Queensland Rail's suggested 15%. Applying this revised estimate of capacity unavailability to a 50% coal path allocation reduces the allocation percentage for pre 1995 assets to 34.5% (rather than the 61.7% and 42.5% allocations proposed by Queensland Rail)

3.4.3. End-User Funded and Coal Specific Capital Expenditure

New Hope accepts that investment incurred specifically for coal services (whether Queensland Rail or user funded) be fully allocated to coal services. Similarly, investment incurred specifically for non-coal services (e.g. the Queensland Government funded investment in new passing loops and tunnel works) should be fully allocated to those other services.

It would also seem equitable that any user funded infrastructure receives a return equivalent to that achieved by Queensland Rail.

3.4.4. Summary of Coal Train Path Allocation Percentages.

As discussed above, New Hope considers that the train path allocation percentages should be adjusted to reflect:

- the impact of capacity enhancements for non-coal freight on the % of paths allocated to coal services; and
- a more robust estimate of the capacity losses arising from the curfews/restrictions on entry to the Brisbane Metropolitan Region driven by passenger service requirements.

4. Building Blocks

This section provides comments on Section 4 of Queensland Rail's submission, adopting the same numbering and headings.

4.1. Opening Asset Value

4.1.1. Appropriateness of DORC Valuation

We have no 'in principle' objection to DORC methodology; however we note that it is not a precise methodology because there is considerable scope for judgement to be exercised. In this context, we believe that there are significant flaws in the way that the DORC methodology has been applied to the valuation of the Western System assets, which result in the valuation being excessively high, considering the poor condition of the assets, together with the severe constraints on efficient above rail service delivery caused by inadequate below rail service standards.

Impact of actual asset condition

We note that the asset valuation undertaken by Everything Infrastructure for the Authority's 2009 Decision valued the asset on a modern engineering equivalent basis – which is assumed to be 50kg rail on concrete sleepers. This is a standard valuation approach, and we do not object to valuations being based on a modern engineering equivalent.

However, to the extent that the actual condition of the asset is less than the standard assumed in the valuation, and that this will cause additional costs in the future as compared to what would have been assumed for the asset being valued, we believe that a condition based deduction to the asset value should be made. This is fully consistent with the approach that was adopted by the Authority in relation to QR Network's initial DORC valuation for its first access undertaking in 2001. In this case, the Authority concluded that the condition of the Goonyella system ballast was poorer than would typically be expected for the valued asset, and therefore a condition based deduction to the asset value was made. The amount of this deduction reflected the additional expense forecast to be incurred over a ten year period as a result of the excessive ballast fouling.

This philosophy was again confirmed by the Authority in QR Network's 2010 access undertaking, where allowable revenues were adjusted downwards to reflect the poor condition of QR Network's ballast.

In the context of Queensland Rail's Western System, we believe that the actual condition of the infrastructure requires far greater ongoing capital and maintenance expenditure than would be the case for a railway of the type and age assumed in the valuation. For example:

- The Western System Asset Replacement Project is, as previously identified by Everything Infrastructure and accepted by the Authority, simply contributing towards bringing the infrastructure up to the standard assumed in the asset valuation;
- We believe that this is also likely to be the case with a number of other forecast capital projects, particularly those involving relaying sections of track with concrete sleepers and 50kg rail.

In addition, the maintenance regime required given the actual standard and condition of the track, in particular the extent of timber sleepers and bridges, far exceeds that which would be the case if the track was actually constructed at the standard assumed in the valuation, even accounting for the assumptions on age.

We believe that the Authority should consider whether deductions to the DORC valuation are appropriate to reflect the actual condition and required maintenance regime for the Western System assets, as compared to that assumed in the valuation.

Inadequate Service Standards

New Hope believes that the Authority need also consider whether the poor performance standards of the Western System should lead to either to further optimisation or depreciation of assets as part of the DORC valuation.

The appropriate scope of optimisation was first considered by the Authority in the valuation of QR Network's central Queensland rail infrastructure for the 2001 access undertaking. At this time, the Authority considered whether it should reduce the opening asset value to reflect the additional costs imposed on operators due to the narrow gauge construction standard. While the Authority ultimately

chose not to adopt this approach in that instance, New Hope considers that the issues are far starker in the Western System and there is merit in reviewing whether the asset value should be optimised to reflect the inefficient costs imposed on above rail operators due to poor system design, particularly low axle load and limited train lengths.

An alternate approach would be to reflect, in the assumed depreciation of the assets, that the infrastructure is close to being technically obsolete. This would likely result in the assets being considered to be close to life expired, resulting in a depreciation estimate far greater than 50% of the Optimised Replacement Cost.

As discussed in Section 2.2.3, the inadequate infrastructure standard of the Western System places severe constraints on the operation of an efficient above rail service. It is inconceivable to New Hope that these impacts would be considered irrelevant in the valuation of those infrastructure assets.

4.1.2 Tunnel Allocation Adjustment

There is no transparency provided on the valuation by "Everything Infrastructure" of the tunnels. Given the tunnels are over 100 years old, technologically obsolete, limit vehicle size etc., it is difficult to understand how such a high value of $85.9m was determined.

It is accepted that errors in allocation of assets need to be addressed.

4.1.2. Western System Asset Replacement Project Reduction

Consistent with the discussion in 4.1.1 above, we believe that the Authority should retain its position from the 2009 Draft Decision that this project simply has the effect of bringing the infrastructure up to the assumed valuation standard, and as such, the full value of this project should be deducted from the opening DORC valuation.

4.1.3. Summary of Opening Asset Value

In the absence of transparent asset value and condition information, it is not possible to provide precise comments on the opening asset value. However, it is New Hope's view that the opening asset value is clearly excessive, given the high ongoing maintenance and asset replacement costs resulting from the actual asset condition being less than that of the 'valued asset', together with the high costs imposed on above rail operators due to the poor service standards provided by the infrastructure.

4.2. Asset Lives and Indexation

4.2.1. Asset Lives

It appears unusual that Queensland Rail intends to include the 'top 600' in an amalgamated 'track' asset with a life of 35 years.

The term top 600 usually is taken to mean the top 600mm of the formation or earthworks. In a modern well- constructed railway, the top 600 is an engineered compacted layer of suitable materials to deliver a high strength capping over lower strength bulk earthworks. In most railways, the top 600 would be considered to form part of the formation (or earthworks) asset. An amalgamated track asset would typically only include rail, sleepers and ballast.

The effect of QR's approach is to substantially shorten the assumed life of the top 600. Generally all earthworks including the top 600 are considered to have a 100 year life.

The 35 year life appears to be more consistent with a heavy haul railway than the West Moreton System. It is proposed that the asset lives should be revisited taking into account the actual infrastructure in place.

4.2.2. Asset Indexation

In the interim, 2.5% seems appropriate for indexation on the basis that it is reviewed and corrected periodically.

4.3. WACC

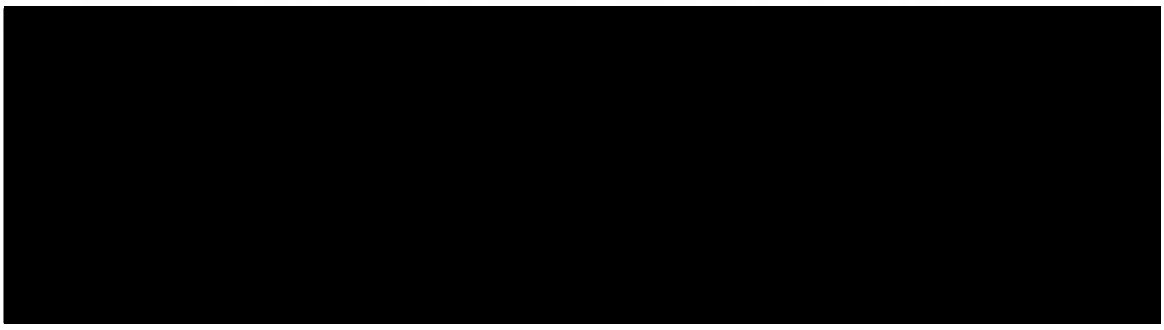
New Hope appreciates that QR has not taken an aggressive approach to determining an appropriate WACC. While this is the case, the WACC still over-compensates QR for its real commercial and regulatory risks. QR has limited downside risk due to take or pay arrangements and limited liability for failure to perform, but has an upside "windfall" if above contract tonnage is hauled. It is noted that QR Network's first access undertaking in 2001 had a lower asset beta of 0.4 instead of the 0.45 proposed.

New Hope relies on the QCA to assess the reasonableness of the WACC claim for the purposes of establishing a ceiling price. However, where the building block approach results in a ceiling price which is uncompetitive, unreasonable, and unlikely to meet the requirements of the QCA Act, we consider that recovery of a full WACC on the full DORC valuation is not sustainable.

4.4. Volume Forecasts

Actual volumes have exceeded the assumed contract entitlement of 7.5 million tonnes per annum (based on 87 contracted coal paths at 85% availability). This has provided QR with a revenue "windfall" for the 2.63 million tonnes above contract tonnage over the last two years. Paying the same access tariff for above contract railings is not warranted, given that recovery of the fixed costs of service delivery (including fixed operating and maintenance costs and incremental capital investment) is achieved at full contract volumes. Volumes in excess of this, particularly when using ad hoc paths, have a very low incremental cost to Queensland Rail.

Further, from the users' perspective, above contract railings are ad hoc and not guaranteed, and hence have less value. For example, companies will not sign off on major investments without some guarantee of being able to get the product generated by the investment to market – in this circumstance ad hoc paths have very little value.



Given the absence of a revenue cap for the Western System, options for addressing this are to either:

- Modify the volume forecast to reflect a forecast of actual railings; or

- Adjust the 'ceiling price' to calculate a discount rate for uncontracted paths at a level that reflects the incremental costs associated with providing ad hoc paths, given that fixed costs (including all coal specific investment) are fully recovered through contracted paths.

New Hope believes that the second option is preferred, as this reflects a more efficient pricing structure, and better reflects the differences in value of contracted and ad hoc paths.

4.5. Capital Program

The coal specific capital program of $76.324m (top of page 17) appears excessive. The Worley Parsons West Moreton Reference Tariff Submission Review (Worley Parsons Report) reviewed 14 projects having a combined cost of $73.9m. The larger projects only are commented on below:

The Slope Stabilization project ($7.793m) according to Section 5.2.4 of the Worley Parsons Report is not as yet adequately scoped, consequently the dollar amount is a high level estimate. It could be argued that this is not a coal specific project.

The formation repairs ($13.25m) are to attend to 5km of the 17.4km identified by QR. It is noted on page 20 of the Worley Parsons Report, that *"some of the plant rates used for Queensland Rail owned plant were considered high in comparison with industry expectations for similar equipment"*. It might also be speculated that better work methods might reduce this cost.

Timber Bridge Strengthening and Elimination ($10.504m) were considered by Worley Parsons to be at the *"higher end of industry average..."* (Section 5.4.4, page 25).

The estimate for Check Rail Curves Toowoomba Range and Little Liverpool Range ($12.220m) appear to have been made on the experience of attending to one curve only. This amount also seems very high by normal standards.

The Western System Asset Replacement ($23.581) for Rosewood to Macalister is designed to replace 20.115km of track and 19 turnouts. Unfortunately the unit rates in the Worley Parsons report are not available. In the absence of this information, it is difficult to understand why the costs would exceed $15m. Rail typically costs less than $2,000 per tonne to supply or $100,000 per kilometre of rail (or $200,000 per kilometre for both rails). Indeed, Section 5.9.4 of the Worley Parsons Reference Tariff Submission Review (page 33) identifies a QR estimate of $1.937m for 20km of re-railing which is equivalent to $100,000 per kilometre. New concrete sleepers are expected to cost approximately $150,000 per km installed. Significant ballast replacement is estimated to be unlikely to cost more than $100,000 per km. Turnouts including points machines are expected to cost approximately $250,000 each installed.

In summary, the capital costs are considered to be high by normal standards and in some cases based on preliminary estimates. It is also apparent that some of the works are not solely related to coal trains. New Hope relies on the QCA and its advisers to assess the prudency of scope, prudency of standard and prudency of cost.

4.6. Maintenance Program

Allocation methodology

New Hope has significant concerns with the methodology proposed for allocating maintenance costs to users on the Western System. It appears that Queensland Rail's maintenance cost estimate covers the entire rail section from Rosewood to Miles. Queensland Rail then proposes to allocate these maintenance costs to individual track segments using a gtk allocator.

We do not believe that a gtk allocator is an appropriate method for allocating costs between track segments, and is not always an appropriate means of allocating costs of a track segment between users. The preferred approach would be to identify the forecast costs based on the actual maintenance task required on each track segment, and for many activities, it should be possible for Queensland Rail to do this. However, to the extent that this is not possible, then an allocation approach that is more aligned with the cost drivers should be adopted.

For track maintenance (excluding mechanised resleepering), there are significant fixed costs associated with maintaining a section of track, regardless of the level of use. These include the costs of inspections, time based maintenance activities (which is a particular issue where there are substantial timber sleepers and structures) and some other elements of preventative maintenance work. These fixed costs should be allocated on a $/track km basis as they relate to the extent of the network being maintained. Beyond this, track maintenance costs will increase with usage, and a gtk allocator is appropriate.

The large forecast expenditure on mechanised resleepering should be allocated on a track km basis, over the segments of track where Queensland Rail intends to do this work.

Allocations for trackside systems should be on a train km basis, as maintenance of components such as signalling and radio infrastructure are independent of train weight. This is consistent with the rail costing convention (called NFG2) agreed by the former National Freight Group of the Australian Railways.

New Hope considers that the net effect of Queensland Rail's allocation approach is to allocate an excessive proportion of the maintenance expenditure to coal services and, as a result, should be rejected by the Authority.

Forecast maintenance costs

Maintenance costs are expected to vary between $20.7m and $29.2m per annum over the four years 2013/14 to 2016/17 (Worley Parsons Report, Section 4.1, page 11).

Track maintenance excluding mechanised resleepering is in excess of $15m per annum. This cost is equivalent to an average of $50,000 per km. This seems very high for a light axle load network excluding mechanised resleepering. The Australian Competition and Consumer Commission final decision on the Australian Rail Track Corporation's Access Undertaking in 2008 identified QR's then maintenance costs excluding major periodic maintenance were between $8,920 to $12,870 per kilometre. The increase to $50,000 per km is very significant. Such high maintenance figures are inconsistent with the dollar value of the asset base. If maintenance costs are this high, then asset values should be virtually zero. Even for old, fully depreciated infrastructure, the maintenance costs seem high for such a low axle load. It is suspected the drivers for the high maintenance costs are related to inefficient work methods and or poor possession practices.

The mechanised resleepering in 2015/16 and 2016/17 are estimated to be equivalent to $76, 000 per kilometre between Rosewood and Miles. This is equivalent to $54 per sleeper for every main line sleeper despite only 15% of the timber sleepers are being replaced! Given full replacement with all new low maintenance concrete sleepers are not much more costly (about $100 per sleeper inserted) this raises questions whether the investment is prudent or optimal. Section 6.3.2 of the Worley Parsons report indicates average QR costs of $339 to $352 per sleeper replaced (42,743 sleepers costing $14,497,000 and 26,629 sleepers replaced for $9,384,000). While Worley Parsons considers these costs to be within *"an expected industry range...."* clearly there are significant inefficiencies in this assumption to cause the cost to be triple that normally expected.

It is suspected that QR's practices could benefit from more efficient work methods, e.g. one iron ore railway has a 10 day annual closure which allows highly efficient maintenance activities which would achieve much lower resleepering costs. Plant, equipment and human resources are marshalled for the 10 day annual closure and then reallocated to other parts of the network. This approach facilitates efficient plant and labour utilization.

Maintenance in the last undertaking was forecast at $57.4 million whilst in this undertaking (p18 of general submission) it is forecast over the 4 years to be $104.5 million. This represents a massive 82% increase. Given efficient rail organisations consistently improve productivity by around 2% per annum, this increase is difficult to comprehend.

In summary, maintenance costs are considered to be very high and extremely inefficient. QR may wish to consider alternative work methods to reduce these costs to normal levels. The normal level of productivity improvement has not been achieved given the significant 82% increase in costs over the 4 years.

4.7. Other Operating Costs

QR has noted its expenses are inefficient. New Hope does not agree with the "glide" to efficient costs. QR should be incentivised to improve its efficiency by being compensated for efficient costs only from the start of the undertaking.

The corporate overhead allocation is 46.6% of the train operations management and other expenses combined. This is well in excess of normally accepted levels of around 10%, again suggesting significant inefficiencies.

One could also argue the reasonableness of some of the components. Train control costs of $3,070,000 for approximately 12 paths per day (87 contracted per week), seems excessive. This is equivalent to an average of three to four coal paths being controlled per control shift. This would seem a very comfortable workload for one controller. If we assumed 6 people are required to operate one control board continuously and the full employment cost per controller was $150,000 per annum, then control costs would be around $0.9m per annum. If 10%were added for control supervision, the control cost would be approximately $1m per annum. It is unclear how costs could be three times our estimate given plant and software is separately identified.

In summary, other operating costs appear to be several orders of magnitude higher than what would be expected and hence are assumed to be very inefficient and absent of normal productivity improvement.

5. Conclusions

New Hope Coal strongly objects to the Queensland Rail proposed reference tariff. The proposed Western System tariff is more than double the next most expensive benchmarked access charge and worse still, for a very poor access service offering. The access offering permits only small, low axle load trains to operate in a constrained manner due to the absolute priority of passenger trains. The poor service offering discourages above rail competition as the incumbent operator has a unique advantage in terms of availability of low axle load rollingstock.

The high access charge and excessive escalation has impacted the competitiveness of Western System Coal producers. Rather than achieving productivity improvements, Queensland Rail proposes to increase maintenance costs by a massive 82%. The proposed capital program also seems to have high unit costs and the scope is not solely for coal train services. Very high proposed investment levels and very high maintenance costs are inconsistent with the inferior access service offering.

We suggest that the proposed tariff should not be approved, having regard to the criteria set out in section 138 of the QCA Act, because:

- The resulting tariff would not be consistent with the object of Part 5 of the QCA Act as it would not promote the economically efficient use of the infrastructure with the effect of promoting effective competition in downstream markets. Impacts which would be inconsistent with the object of Part 5 would include:
    - The proposed tariffs will place coal producers in this region in an uncompetitive position, which will impact negatively on competition in coal markets (New Hope estimates it is disadvantaged by between $8/tonne and $20/tonne).
    - The high tariffs will discourage further investment in this system. In fact, utilisation of existing infrastructure will be likely to decline over time, as mines become more uncompetitive due to high rail costs, thereby preventing economically efficient use of the infrastructure
    - Low volumes combined with poor below rail service standards will continue to limit the feasibility of above rail competition.
- The proposed tariff is not in the public interest, including:
    - the public interest in having competition in markets including above rail which is affected by the low infrastructure standards and service offering.
    - the public interest in promoting economic activity, avoiding job losses, creating additional jobs, maintaining and increasing royalties, and maintaining and increasing taxes paid by mining companies, all of which rely on the ability to access internationally competitive coal supply chains.
- The interests of persons who may seek access to the service would be severely adversely affected. Mining companies, as potential access seekers, would face higher costs, reduced profitability,

reduced competitiveness and the potential loss of expansion opportunities due to competitiveness of projects.

- The proposed tariff does not reflect any reasonable assessment of the applicable 'reference transaction', that is, the shared expectation of how prices would change over time that existed prior to the parties investing in sunk mine and rail infrastructure investment.
- The proposed tariff does not promote an effective infrastructure development decisions nor does it reflect desired levels of productivity improvement.

We note the pricing principles in section 168A of the QCA Act, particularly the principle that the price of access should generate expected revenue for the service that is at least enough to meet the efficient costs of providing access to the service and include a return on investment commensurate with the regulatory and commercial risks involved. In this case, a key question is the value of the "investment" on which a return should be allowed. While we agree that it is appropriate for Queensland Rail to earn a return on investments made for the purpose of providing access to coal services, we do not believe that this should guarantee a return on the DORC valuation of pre-existing assets, particularly where those assets had previously been valued at a scrap valuation. The extent to which Queensland Rail should be able to recover this DORC valuation should depend on a broader range of factors; including the overall competitiveness of the Western System supply chain and consideration of the applicable 'reference transaction'.

In conclusion, rail costs have a significant negative impact on New Hope's competitiveness. Without a competitive access tariff the future of coal mining along the Western System must be called into question.

Yours faithfully,
NEW HOPE GROUP

[redacted]

SHANE STEPHAN
Chief Financial Officer

Attachment A

Indicative Operator and Access Benchmarks [redacted]