



## AUSTRALIAN RAIL TRACK CORPORATION LTD

6 June 2014

Review of rate of return and remaining mine life from 1 July 2014  
Independent Pricing and Regulatory Tribunal  
PO Box Q290  
QVB Post Office NSW 1230

### **Review of rate of return and remaining mine life relating to the Hunter Valley Coal Network from 1 July 2014**

Thank you for the opportunity to make a submission in relation to your review of rate of return and mine life with respect to the Hunter Valley coal sectors currently forming the Hunter Valley Coal Network under the NSW Rail Access Undertaking (NSWRAU). ARTC notes that the Tribunal has released for consultation a Draft Report and Draft Decision (**Draft Decision**) on these matters.

In relation to this review, ARTC has provided some earlier advice in relation to ARTC views and experience in this matter for the Tribunal's consideration.

ARTC recognises that those parts of the Hunter Valley Coal Network that are now covered by ARTC's Hunter Valley Access Undertaking (HVAU) are no longer covered by the NSWRAU, and that this review only relates to those parts of the Hunter Valley Coal Network managed by RailCorp, which primarily services the carriage of export coal from mines south of Newcastle to Newcastle ports, and domestic coal from the Hunter Valley to southern power stations (as well as other non-coal traffic). These coal services also utilise parts of the ARTC network covered by the HVAU.

As such, whilst ARTC will not be directly impacted by the outcome of this review through the application of any regulatory constraints, there may be indirect outcomes for ARTC, including any impacts on the sustainability of relevant coal traffics using the ARTC network, as well as any regulatory precedents that may arise.

ARTC considers that it is important that there be a degree of consistency between regulatory outcomes across jurisdictions, particular where network users operate across more than one jurisdiction.



The Tribunal would be aware that the HVAU was approved by the ACCC in June 2011 and has now been in operation for nearly three years. During this time, a new approach to the commercial arrangements that exist in the Hunter Valley, including direct producer contracting, and coal chain coordination through the Hunter Valley Coal Chain Coordinator, was developed. By and large, ARTC considers that the new arrangements have worked well and have delivered significant benefits to both the users of the Hunter Valley Coal network as well as ARTC, through strong market growth underpinned by significant investment in the network. ARTC considers that the HVAU has operated to support this growth, even in the difficult economic climate currently facing coal producers globally.

The ACCC has approved a rate of return and remaining mine life for the network covered by the HVAU following extensive consultation with stakeholders as part of its assessment of the HVAU. During this process, ARTC provided significant information in support of its position in relation to these two elements of the HVAU.

ARTC recognises that the HVAU network carries much larger coal volumes for a broader number of producers and requires different investments to that for the network subject to this review, and this will need to be factored into the Tribunal's determination.

Having said this, the HVAU was developed in a period where the efficiency of the operation of the Hunter Valley export coal chain was being reviewed by regulators and governments as a result of some well documented manifestations of inefficiency such as extensive shipping queues at the port of Newcastle. The outcome of these reviews was the development of more regulation to be applied to coal chain participants (including ARTC) increasing the focus of participants on the operation of, and investment in, infrastructure that was aligned and aimed towards delivering efficient outcomes for Hunter Valley coal chain as a whole in order to improve coordination of the chain and create greater certainty of access to users.

Whilst ARTC supports this increased focus on whole-of-coal chain outcomes, ARTC believes that this creates greater risk for individual participants where operational and investment decisions that might be optimal for the coal chain may not be optimal for the individual participant.



Like ARTC, RailCorp is a participant in the Hunter Valley export coal chain and whilst it does not face the same significant regulatory pressure that arose from earlier industry and regulatory reviews, ARTC expects that it may still face market and policy pressure to ensure that its investments meet broader supply chain objectives. ARTC considers that this is an important consideration with respect to the relevant Sectors.

## **Rate of Return**

The rate of return approved by the ACCC (9.1% real, pre-tax) for five years from the commencement of the HVAU (June 2011) was proposed by ARTC to the ACCC as part of its final HVAU application in June 2011. During consultation leading to the ACCC's approval, ARTC negotiated a package of amendments to the HVAU with key Hunter Valley coal producers (and the industry representative body) that resulted in the support of those parties for ARTC's proposed rate of return.

The reason for the separate negotiation with the coal industry was because the ACCC was only willing to accept a rate of return of 8.57% real, pre-tax based on its views as to the appropriate values for CAPM parameters normally underpinning the rate of return. These CAPM parameters were based on the ACCC's assessment of prevailing market conditions and its views on regulatory precedent at the time. ARTC was unable to move forward in relation to obtaining sufficient funding for the substantial investment program sought by industry on the basis of that return.

As such, whilst ARTC's proposal of 9.1% real, pre-tax was based on certain values for the CAPM parameters<sup>1</sup>, the ACCC's final decision in relation to the HVAU was quite clear in accepting the 9.1% real, pre-tax as a negotiated outcome between ARTC and the coal industry, and not the CAPM parameters that underpinned the accepted rate of return.

ARTC understands that a rate of return determined on the basis of the CAPM framework can depend on certain market based parameters that vary with changing economic conditions and, as such, an equivalent rate of return determined in 2014 may be different to that in 2011.

ARTC notes from the Draft Decision that a rate of return that should apply from 1 July 2014 of 6.1% (real, post-tax) has been determined. In the Draft Decision, the

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<sup>1</sup> <http://www.accc.gov.au/system/files/Revised%202010%20HVAU%20Supporting%20Document%20-%20Rate%20of%20Return.pdf>



Tribunal has indicated that this rate of return equates to a real-pre-tax rate of return of 7.7%.

ARTC recognises that these rates represent mid-points of ranges of feasible returns and, as such, the values of underlying parameters are not precise. The Tribunal appears to have based its range and mid-point on CAPM calculations derived from both current market data and a view on long term averages for market parameters as described in Table 1 below.

**Table 1 Market based CAPM parameters referenced by the Tribunal**

Parameter	Current Market Data	Long-term average
Nominal risk-free rate	4.1%	5.0%
Inflation	2.8%	2.9%
Debt margin	3.3%	2.9%

ARTC has considered the rate of return negotiated with the industry in 2011, and accepted by the ACCC at the time, in light of the market based parameters proposed in the Draft Decision and has concluded that a equivalent rate of return in 2014 would be likely to be broadly consistent with that determined in the Draft Decision.

However, ARTC would expect a higher return outcome reflecting the additional commercial and operational risks faced by ARTC in the Hunter Valley compared to those currently faced by RailCorp.

### **Remaining Mine Life (RML)**

Under the NSWRAU, and HVAU, the annual depreciation allowance is based on the useful life of a Segment determined having regard to the average remaining life of coal mines utilising that Segment.

Both the HVAU and NSWRAU have approved RML estimates for the Hunter Valley coal network. In both cases, a single estimate applies for all Segments on the network.

Relevant provisions under the HVAU contemplate different estimates applying to different parts of the ARTC Hunter Valley coal network<sup>2</sup>, but the current determination applies a single estimate.

There are however some differences in relation to the determination of annual depreciation under the NSWRAU and HVAU.

Under the NSWRAU, depreciation is to be determined under a straight line methodology. Under the HVAU, greater flexibility exists where the requirement to use a straight line methodology applies unless the access holder and ARTC agree otherwise and the ACCC approves. This flexibility exists in order to deal with some of the risks inherent in having a single fixed straight line methodology faced on either side, as noted by the Tribunal's consultant (**Sapere**). This flexibility can also be used to address some of the shortfalls identified by Sapere with different methods of determining RML (such as stranding risk).

Also under the HVAU, the estimation of RML is to have regard to:

- **average mine production levels anticipated during the Term having regard to Coal Chain Capacity** at any time; and
- **marketable coal reserves** estimated for each mine **existing at the time of the determination** or **expected to commence during the 5 year period following the time of the determination**.

Under the NSWRAU, the determination of RML is less prescriptive, opening up the possibility to consider a wider range of methodologies and information sources.

As such, the adoption of a similar approach to that required under the HVAU can be contemplated by the Tribunal, or the Tribunal is free to contemplate an alternative approach. Where an alternative approach is adopted, it is likely that the RML estimate will be different to that which would be determined under the more prescriptive approach under the HVAU. In any event, the less prescriptive approach under the NSWRAU provides an opportunity for the Tribunal to contemplate matters such as consistency of regulatory outcomes across jurisdictions.

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<sup>2</sup> HVAU Section 4.7(b)



Under the HVAU approach, an RML estimate of 22 years (terminal year 2032) was approved by the ACCC. In the Draft Decision, the RML has been increased to 30 years from 2014 (terminal year 2044) from the previous determination in 2009 (30 years from 2009, terminal year 2039). In effect, the Draft Decision extends RML by 5 years on the current settings for the Hunter Valley under the NSWRAU, and is 10 years higher than the current settings under the HVAU.

From the Draft Decision, ARTC has concluded that the higher RML estimate results from:

- The adoption of the longest-lived substantial mine life (LLSM) approach compared to the weighted average mine life approach (WAL) adopted for the HVAU determination.
- The inclusion of a substantial mine (Maules Creek) likely to commence production in the near term. This mine was not considered for inclusion in the HVAU determination as it was not expected to commence production during the 5 year period following the time of that determination.
- The substantial upgrading of the Mt Arthur mine life by BHP Billiton in the period since the HVAU determination.
- The adoption of historical annual production estimates (highest of 2008-2011) compared to levels of production forecasted to be contracted, over the long term, at the time of the HVAU determination, which underpin long term coal chain capacity expansions planned at the time. Future annual production estimates also contemplated expected coal chain capacity constraints.
- The adoption of mine lives for the two longest life mines (Maules Creek and Mt Arthur OC) based on coal resources and production capacity levels, as opposed to marketable reserves and actual production.

ARTC considers that all of these aspects of the RML estimation in the Draft Decision, whilst technically permissible under the NSWRAU, would tend towards increasing the RML estimate. Some of these aspects would not be permissible under an HVAU determination.



ARTC contends that the combined impact of all of these aspects of the RML estimation in the Draft Decision is likely to result in an estimate at the extreme upper end of what might be considered reasonably feasible, and inconsistent with the equivalent outcome under the HVAU.

Having said this, ARTC accepts that some of the divergence may result from differences in the prescribed estimation approach under the HVAU and the NSWRAU, and the different point in time of the RML estimate under the HVAU (2009/10) and NSWRAU (2014).

ARTC expects that if it were to estimate RML under the HVAU in 2014, the estimate may increase, primarily due to the inclusion of Maules Creek and some reduction in production expectations due to the current less buoyant coal market levels. ARTC is unable to determine the quantum of the increase but contends that it is unlikely to approach the RML determined in the Draft Decision.

In relation to the specific aspects of the RML estimation in the Draft Decision described above, ARTC offers the following comments:

- **LLSM approach.** The Tribunal's determination of RML in 2009 had significant regard to its consultant's advice (LECG) at the time. This advice adopted the LLSM approach, in contrast to previous determinations that adopted the WAL approach. At the time, ARTC expressed its concerns with the adoption of the LLSM approach in submissions to the 2009 review. These concerns have not changed and ARTC does not intend to re-iterate these in this submission, other than to say that the LLSM approach is always likely to result in a higher RML estimate than the WAL approach and possibly at the upper end of reasonable RML expectations. This will result in increased risk of stranding of investment costs to the infrastructure owner which, unless compensated by other means, will reduce investment incentives.

In addition, Sapere may have increased the possibility of over-estimation by somewhat arbitrarily limiting the sample of 10 LLSM's to the 5 longest life LLSM's on which to based the RML estimate. Further, the sample of 5 longest life LLSM's includes two mines with end years based on less certain coal resource estimates and production capacity levels. If a more conservative position were to be taken in relation to determining end year for these two mines, a lower RML estimate may result.



In any event, the LLSM approach has been used by Sapere in order to develop an RML estimate for coal sourced from the Hunter Valley region to be supplied to the power stations south of Newcastle. This was considered appropriate by Sapere on the basis that coal supplied from the Hunter Valley regions to these power stations represented the predominant current and likely future use of the sections, as opposed to export coal transported from the southern mines to Newcastle.

ARTC provided some earlier informal advice to the Tribunal in order to assist it in coming to its views in relation to the RML estimate<sup>3</sup>. Specifically, in that advice, ARTC informed the Tribunal of the following:

*'In relation to those Sectors relevant to this determination, the NSWRAU requires reference to be made to Hunter Valley coal mines utilising these Sectors.'*

*ARTC notes that over the past five years or so export coal traffic from the southern coal mines to Newcastle has increased significantly whilst domestic movements from Hunter Valley mines to the southern power stations and Port Kembla have declined. The substantial majority of coal utilising the relevant Sectors is now export coal to Newcastle. It is not clear as to whether this trend will continue.*

*Given this, ARTC would expect that an RML estimate for the relevant Sections would represent an average fairly heavily weighted towards the remaining life of the southern mines, together with a more general estimate for the broader Hunter Valley networks, as coal to the southern power stations and to Port Kembla has historically emanated from several different mines in the lower and western Hunter Valley.*

*The most recent RML proposal by ARTC accepted by the ACCC in 2010 (22 years in 2010) indicated several southern mines utilising the relevant Sectors at that time. Uses included both rail transport of domestic coal to local power stations at Eraring and Vales point, as well export coal to Newcastle. At the time an average RML for southern mines was proposed and accepted at around 16 years (terminal year 2024).*

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<sup>3</sup> ARTC Letter to the Tribunal dated 28 March 2014.



*A brief review of relevant coal company websites and industry reports indicate that coal production and transport patterns may have changed over the last few years in response to the changing market environment (e.g. mine closures, project postponements). In relation to export coal transported to Newcastle, key mines currently (and near term) would seem to be Mandalong and Newstan (Centennial) and West Wallsend (Glencore). ARTC's analysis of data sources indicate an average RML for these mines (based on current marketable reserve estimates and production) of around 10 to 15 years, which is broadly in line with ARTC's RML proposal accepted by the ACCC above.*

*As such, and based on ARTC's brief review, ARTC would expect a reasonable RML estimate, as at 2014, for the southern mines railing export coal to Newcastle, being the predominant use of the relevant Sectors for export coal, to be around 10 to 15 years. ARTC considers that this would be aligned to the RML estimate accepted for the HVAU network by the ACCC.<sup>4</sup>*

This advice would appear to be at odds with that provided by Sapere, leading to the Tribunal's conclusion as to the relevant use of the RailCorp network, and RML estimation.

ARTC is only able to base its views on volumes contracted to be carried on the ARTC network. Nevertheless, this advises ARTC that over the past 3-4 years there has been no significant coal domestic coal movements from mines in the Hunter Valley to Eraring/Vales Point. There have been some smaller movements further south to Pt. Kembla.

The predominant movement of domestic coal on the ARTC network is to Macquarie Generation near Muswellbrook.

This also advises ARTC that movements of export coal from Newstan/Teralba carried on the ARTC network between Islington and the ports have increased over the last few years to around 4mTpa. Export volumes are forecast to be even higher in the medium term at least, and ARTC has no evidence of contracting for any substantive domestic coal volumes to Eraring or Vales Point from the Hunter Valley in the future. As stated above, it is not clear whether this trend will continue in the longer term.

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<sup>4</sup> Op. Cit. p6.



ARTC does not consider the wording of the NSWRAU (Clause 3.2(c)(ii)) in relation to whether the existing utilisation of Sectors or some future utilisation Sectors is relevant to the RML estimation. Provisions to reassess the RML estimate every five years would tend to suggest that the utilisation at the time of estimation or, at best, utilisation over the following five year period would be more relevant to the current RML estimation, where any change in future utilisation would be dealt with at a subsequent estimate.

Based on ARTC's understanding of the current utilisation of the Sectors and utilisation in the near to medium term, the RML estimate should be weighted more towards the life of southern mines exporting coal north over the Sectors.

- **Inclusion of Maules Creek.** Based on existing available information in relation to commencement of production of Maules Creek, it is reasonable to include this mine. This mine would be included in an RML estimate determined in 2014 under the HVAU. Refer to further comments below.
- **Upgrading of the Mt Arthur OC mine life.** Based on existing available information in relation to Mt Arthur OC mine it is reasonable to adopt upgraded forecasts where available. However it should be noted that where such a substantial increase in coal reserves become available, an operator may seek to invest in increased production capacity in order to bring revenues and profits forward and mitigate long term risk rather than just extend mine life. Refer to further comments below.
- **The adoption of historical annual production estimates.** Sapere has indicated in its report that it has based the RML estimate on mine production levels observed in the period 2008-2011 (highest). During this period, it is fair to say that export coal production and transport in the Hunter Valley was constrained by a number of commercial, operational and infrastructure obstacles. This led to the well documented government and regulatory reviews described earlier in this submission. The commercial and operational framework in the Hunter Valley that resulted from those reviews and the development of regulatory instruments applicable to coal chain infrastructure (including the HVAU) has significantly improved certainty around access for producers and investment for producers and infrastructure owners.



Since that time there has been substantial investment in coal chain infrastructure that has increased coal chain capacity (coal throughput) significantly from the levels in 2008-2011.

Coal volumes operated in the Hunter Valley during the period 2008-2011 are shown at Table 5 below.

**Table 2 Hunter Valley coal volumes 2008-2011**

Year ending 30 June ...	Coal volume transported by rail (mNT)
2008	96
2009	98
2010	106
2011	117

In contrast, the current and near term capacity of the Hunter Valley coal chain is estimated at around 205mTpa and ARTC expects coal volumes of around 170mTpa – 192mTpa to be transported on its network between 2014 and 2016. As such, ARTC considers that lower production levels used by Sapere based on evidence from 2008-11 may substantially over-estimate mine life for mines and the RML estimate generally, compared to production levels likely to arise over the remaining life of mines, or at least over the next five year period.

- **Use of coal resources and production capacity levels.** ARTC accepts that the accurate estimation of RML will be somewhat contingent upon the availability of mine specific information, including resource/reserve estimates and production levels. ARTC notes that wherever available, Sapere has used reported marketable coal reserves as a basis for determining RML. ARTC considers this to be reasonable and consistent with the approach under the HVAU.

Where not available Sapere has used measured resources of a mine. This has occurred in relation to Maules Creek and Mt Arthur UC, two of the 5 LLSM's used to determine the RML estimate. ARTC considers that the use of resources rather than marketable reserves as a basis for determining mine life creates further uncertainty in relation to the resulting RML estimate. Even measured resources (identification of a deposit of resources with the highest level of confidence –



compared to inferred and indicated resources) are required to undergo assessment in relation to a range of factors including:

- mining;
- processing;
- metallurgical;
- infrastructure;
- economic;
- marketing;
- legal;
- environment;
- social; and
- government

prior to being considered a coal reserve. It is likely that only a fraction of measured resources will ultimately become classified as a marketable reserve and then be transported on the rail network.

Given that these two mines play a significant role in the RML estimate, any uncertainty surrounding mine life directly impacts on the robustness of the RML estimate.

If you have any queries in relation to this advice please contact Glenn Edwards 08 8217 4292, [gedwards@artc.com.au](mailto:gedwards@artc.com.au).



**Kylie Gallasch**

**A/g Executive General Manager, Strategy & Growth**