

ARTC Hunter Valley Access Undertaking – Submission on Proposed Variation

Executive summary

For the reasons set out in this submission, Hunter Valley Energy Coal Pty Ltd (HVEC) considers that the modelling process undertaken in support of the Proposed Variation to the Hunter Valley Access Undertaking (HVAU) has been flawed. Until the flaws have been addressed, the ACCC should reject the Proposed Variation.

The design of any model should be robust enough to:

- deliver the optimum utilisation of coal chain capacity in the short to medium term; and
- incentivise users to continue to invest in and operate their assets in the most efficient manner, generating ongoing efficiencies into the long term.

In HVEC's submission, the model used by the Australian Rail Track Corporation (ARTC) to support to the Proposed Variation not only fails to optimise the current coal chain, but also fails to provide incentives for users to manage their operations and invest in their infrastructure in the most efficient manner.

This outcome is not altogether surprising, given that the ARTC did not consult with users in relation to the current FIS proposal and Proposed Variation prior to submitting them to the ACCC in January 2014.

HVEC is concerned that the Final Indicative Service (FIS) proposed by the ARTC does not promote the economically efficient operation, use of and investment in the relevant infrastructure. Therefore, HVEC requests that the ACCC either reject the Proposed Variation or 'stop the clock' until such time as the ACCC has been able to investigate and address HVEC's concerns further.

HVEC would be happy to meet with representatives from the ACCC in order to discuss these concerns in greater detail.

Background

Access to the Hunter Valley Coal Chain (HVCC) (and the pricing for that access) is covered by the terms of the HVAU.

In recognition of the fact that it would take some time following the initial implementation of the HVAU to identify the optimal operating methodology and rail configuration (above and below rail), an Interim Indicative Service (IIS) was implemented by the ARTC, which was to be subsequently replaced by a FIS.

At all times, it was contemplated that the FIS would represent a service which sought to optimise the utilisation of the Hunter Valley Coal Chain and incentivised users to pursue more efficient operations. The HVAU reflected this, in part, in noting that the FIS should be a service which the ARTC "...considers would deliver the optimum utilisation of Coal Chain Capacity, given certain System Assumptions".¹

This is to be achieved through the use of the appropriate model, as noted by the ACCC in its Consultation Paper (at paragraph 1.1), where it states that "...The purpose of the Indicative Service is to indicate to users the coal train configuration that would contribute to achieving the most efficient utilisation of coal chain capacity ... based on modelling by the ... HVCCC".

¹ HVAU, s 4.18.

The ARTC published its Consultation Paper on the proposed options to the FIS in October 2013. This triggered a formal consultation process with stakeholders (including HVEC) which resulted in submissions being made to the ARTC and the ACCC.

Following that process, the ARTC subsequently abandoned the proposed 2013 FIS and instead submitted the current (revised) FIS and Proposed Variation to the ACCC. This FIS effectively seeks to maintain the current IIS in most respects (i.e. 96 wagon trains in Pricing Zones 1 and 2 and the 82 wagon trains in Pricing Zones 1 and 3, albeit with some variations to the axle loads and speeds in the case of Pricing Zone 3).

Response

HVEC is fully supportive of the FIS process contemplated by the HVAU (i.e. identifying the optimal operating configuration for the Hunter Valley Coal Chain). However, for the reasons set out below, HVEC retains several concerns regarding the integrity of the model used by the ARTC in finalising the Proposed Variation, the outcomes of the modelling process and the content of the Proposed Variation.

HVEC has responded to some of the specific questions posed in the ACCC's Consultation Paper of 18 February 2014 below.

1. Has ARTC undertaken effective consultation and modelling (with the assistance from the HVCCC) in the development of the proposed FIS characteristics? Has ARTC considered feedback provided by stakeholders during the consultation? Do stakeholders have any examples of where ARTC has/has not considered feedback?

In HVEC's experience, the key foundations underpinning the integrity of any capacity model are:

- the functional specification of the model (i.e. that the model has been designed specifically to generate the model in question);
- the assumptions underpinning the model; and
- the report produced after the model has been run, explaining how the model produced the results it did, what alternative scenarios were modelled and what results those alternative scenarios generated.

In the present instance, HVEC has not (nor, to the best of HVEC's knowledge, has any other user) been provided with any information relating to the factors above, or a final report in relation to the modelling.

As such, the model proposed by ARTC in the current FIS is incapable of validation – a critical omission which undermines the integrity of the model. This concern is exacerbated by the significant difference between the current proposed FIS and the October 2013 proposed FIS. While the current proposed FIS largely reflects the current IIS, the ARTC has provided no explanation as to how the model could produce the result that it did in October 2013 and then subsequently produce a completely different outcome in January 2014.

Another reason why HVEC is concerned about the integrity of the model is the fact that it appears to reflect maximum capacity on certain stretches of rail, where that 'maximum' is significantly below the capacity currently achieved by users.

In the absence of the model's assumptions it is difficult to determine whether further (significant) optimisation could have been achieved. The more robust the model, the greater the degree of specificity that can be built into it. For example, an optimal solution may involve a combination of axle load and length enhancements for specific load points.

In other words, certain combinations of train lengths and even axle loads may operate more efficiently with specific load points and may in fact contribute to the whole of the chain

capacity by lowering train volumes and increasing tonnage. However, if the model sought to simply use a single consistent approach to the operating rules, then this opportunity to optimise would be missed.

Train lengths

HVEC notes the train lengths contained in both the IIS and the current proposed FIS.

Following the abandonment of the October 2013 FIS proposal, the ARTC has now (with one very minor change in the case of Zone 3 Pricing) reverted to the IIS train lengths, which were accepted in October 2012 as interim in nature, pending the application of more robust modelling in due course.

It is HVEC's submission that these train lengths are sub-optimal, and reflect a failure by ARTC to adopt a sufficiently robust model. As a general rule, in a double track operating environment in Zone 1, the longer the train, the more efficient the operations and the greater the capacity of the payload (all other things being equal).

The apparent lack of robustness in the model is further demonstrated by the following examples.

Example 1

The current plans for the new arrival roads on Kooragang Island that will service the PWCS Coal Terminal will have a length of 1,543 metres, which is (probably not co-incidentally) the proposed FIS length. However, HVEC is currently able to run trains to lengths of 1,629 meters from its Mt Arthur Coal train load out facility to both the PWCS Coal Terminals and the NCIG Coal Terminal. The new arrival roads have effectively become the restriction to train length in this section of track.

Modelling does not appear to have been undertaken to determine the increased network throughput or efficiencies associated with undertaking the work needed to allow those arrival roads to cater for train lengths up to 1,629 meters.²

Example 2

The reference to a specific number of wagons is an unhelpful metric as Aurizon and Pacific National run wagons of differing lengths. A reference to 96 wagons will produce a very different train length depending on whether the train is run by Pacific National or Aurizon.

Example 3

HVEC can currently cater for trains up to 1,911 metres long at both the Mt Arthur Coal train loading facilities and the NCIG Coal Terminal. By limiting the length of trains under the current proposed FIS, HVEC is potentially dis-incentivised from running the longer (and more efficient) train configurations.

All of these examples demonstrate the need for a model to have the flexibility and robustness to factor in these differing inputs and identify an optimised operating solution – quite likely to vary across and within zones throughout the network. There is no evidence that this has been done, or that the model is even capable of undertaking an analysis with the required degree of complexity.

Incentives

As noted above, the aim of the FIS is to provide an optimised operating configuration. However, this cannot, by its very nature be sufficiently dynamic to cater for innovation or

² While this is the subject of recent ongoing correspondence with the ARTC, the proposed current FIS does not allow for this.

associated infrastructure expansion on the part of the users. While this is understandable, HVEC is concerned that the proposed FIS does not provide any incentives to users to innovate and become more efficient, or give them comfort that they will not be penalised for doing so.

The FIS effectively sets a benchmark price for the defined service. Every other form of service would be priced at the discretion of the ARTC, regardless of whether that service was more efficient than the FIS (having regard to total network throughput) or not.

The FIS should, at the very least, contain some principles which would address the approach that the ARTC would take to promote a more efficient service, such as a 'no worse off' provision for users in relation to user charges under the HVAU. Ideally, however, the pricing under the HVAU should reflect any increased efficiency achieved by a user where this results in increased overall coal chain throughput.

Further, in the case of producers not currently running according to the proposed FIS, it is not clear what access pricing incentives exist for producers to move closer to (or beyond) the proposed FIS. This needs to be clearly articulated, so that appropriate investment decisions can be made by producers and their rail operators.

2. Are the proposed FIS characteristics determined by the ARTC appropriate?

For the reasons set out above, HVEC does not consider that the proposed FIS is appropriate as it does not appear to consider realistic model assumptions.

Specifically:

- in the context of train lengths, HVEC considers that the FIS proposal does not take into account the long term economic life of rolling stock that is currently in service and the contribution these investments have made to the whole of the coal chain. Where investment decisions about rolling stock are made on the basis of certain assumptions on the volume of coal that can be railed, any restriction in throughput under the FIS undermines that investment; and
- in the context of the suggested pricing, a static pricing model which does not provide any flexibility around increased efficiencies or throughput guarantees the need for a further variation in the future to reflect any new system constraints or evolving technology. Where producers typically enter into take or pay contracts with above rail service providers, any future variations to price will undermine the commercial context in which the take or pay agreement is struck with the above rail service provider

It is HVEC's submission that any FIS should reflect these risks through some form of 'grand-fathering' mechanism.

3. Are the proposed FIS Characteristics likely to facilitate more efficient use of the Hunter Valley coal network than, for example, the IIS characteristics?

It is HVEC's submission that the FIS will not facilitate a more efficient use of the Hunter Valley coal network, as the proposed FIS fails to meaningfully optimise the network beyond its current operating methodology.

4. Will the proposed FIS deliver optimum whole of supply chain capacity in the medium to long term?

It is HVEC's submission that the FIS proposal will not deliver optimum whole of supply chain capacity in the medium to long term.

Furthermore, it has not been demonstrated that this FIS has optimised throughput beyond the short term, as the current system assumptions are based around infrastructure investments endorsed or planned only to the expiry of the HVAU in June 2016 as described

in section 3.2 of the proposed variation to the HVAU dated the 31 January 2014.

5. Do stakeholders have any further comments on the modelling used by ARTC (with the assistance of the HVCCC) in the FIS development process?

Many decisions with significant financial implications are going to need to be made by many stakeholders based on the model, and it needs to withstand scrutiny. For this reason, HVEC considers that the model should comply with an effective quality management system (such as ISO 9001), as is the case with any other engineering deliverables. The known constraints, limitations and inputs of the model must be clearly articulated in a functional specification that is endorsed by stakeholders. This is not the case at present.

6. ARTC proposes a number of drafting amendments to the HVAU that are to apply if the ACCC consents to the Proposed Variation. In particular, ARTC proposes to replace existing sections 4.14, 4.17, 4.18 and 4.19 of the HVAU in their entirety.

HVEC would not support the proposed variations to the HVAU until such time as the model complies with an effective quality management system and Functional Specification is endorsed by stakeholders.

7. Are the drafting changes in the Proposed Variation appropriate?

For the reasons set out above, HVEC does not endorse the Proposed Variation.