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Dr Malcolm Roberts
Chairman
Queensland Competition Authority
PO Box 2257
Brisbane
QLD 4001

Your reference: 1-12-12h

Dear Dr Roberts,

Blackwater DAAU – Energy Economics response to stakeholder submissions on its report "Blackwater System Coal Railings Forecast"

Thank you for forwarding for our comment the three stakeholder submissions from Aurizon Network (dated 19 August), Aurizon Holdings and Asciano (both dated 21 August).

The three submissions mainly discuss proposed cost recovery mechanisms for electric traction infrastructure on the Blackwater System. These matters are outside the scope of Energy Economics brief, and we have not provided responses relating to this content. The Asciano submission focuses almost entirely on such issues and is not discussed further here.

We have focused our attention on concerns expressed by Aurizon Network and Aurizon Holdings regarding Energy Economics coal railing volume forecasts. We trust our responses provide further clarity on the forecasts to the QCA and industry stakeholders.

Aurizon Network Submission

1) Forecasting method – high and low cases and median of multiple forecasters

On page three of its submission Aurizon Network writes:

"Aurizon Network notes that forecasting economic variables over long periods of time is highly circumspect and subject to a high degree of error. In this respect medium to long term economic forecasts will conventionally be presented (though have not been by Energy Economics) as either:

- *"a range of potential outcomes which typically broadens over time as the degree of uncertainty increases: or*
- *"a projected point estimate but one which has been derived from survey or data or panel data from multiple forecasters (the median of the survey)."*

Energy Economics notes in response that:

- Energy economics was engaged to evaluate Aurizon Network's railing volume forecasts, which included point estimates for each forecast year, but did not include a range of potential outcomes. We accordingly provided single point annual forecasts for direct comparison.
- In my experience working at various commodity research houses (AME Mineral Economics, Hill & Associates, Wood Mackenzie & Energy Economics) it is uncommon for coal volume forecasts to include forecasts of upper and lower bounds, or for them to be simply compiled from a panel of multiple forecasters.
- Additionally, regarding the use of multiple forecasters, we note that there are only a few coal trade volume forecasting companies that we consider undertake detailed and complete analysis, and these companies in the main produce proprietary forecasts. Such forecasts are not generally available in the public domain, nor are they, to my knowledge, submitted for inclusion in consensus forecast panels.

2) Evaluation of a fiscal 2013 forecast versus actual.

On page three of its submission Aurizon Network writes
"*It is worth highlighting that, even over a single year, volume forecasts for the CQCN are frequently inaccurate by a considerable margin.*"

In support of this statement Aurizon Network tabulated forecasts prepared in 2012 by Energy Economics and Aurizon Network for the 2012/13 financial year and compares them with actual data now available for that year. We note that Aurizon Network only tabulated the forecasts for the Goonyella and Blackwater rail systems, even though forecasts were prepared at the time for all four of the main rail systems, but excluding railings via GAPE. Their table shows a variance between the Energy Economics forecast and actual railings of 8% for the Blackwater System and 5% for the Goonyella System, with the Aurizon Network forecast being more accurate at 5% and 1% variance respectively for these rail systems.

We believe that the more useful comparison point is the total forecast volume, which we have tabulated below. The bottom line 2.8% variance in the Energy Economics forecast for fiscal 2013 represents, in our opinion, a good level of forecasting accuracy, particularly in light of:

- The impact that flooding (associated with ex-cyclone Oswald) had on Moura and Blackwater system railings in February and March 2013.
- The fact that Energy Economics did not have available to it fiscal 2011/2012 year-to-date railing data to use as a base for its forecasts.

Table 1: Central Queensland coal region railing forecast versus actual – fiscal 2013 (Mt net)

	Actual tonnes railed	Aurizon Network forecast	Variance Mt	Variance %	Energy Economics forecast	Variance Mt	Variance %
Coal Railings exc. GAPE	**177.79**	**186.0**	**8.2**	**4.6**	**182.8**	**5.0**	**2.8**

Aurizon Holdings Submission

3) Forecasting method – lack of supporting evidence

On page five of its submission, above-rail operator Aurizon Holdings writes:
"Energy Economics has provided little supporting evidence for its bearish outlook. Given a forecast that the installed capacity of the system will be very substantially underutilised for such a lengthy period of time, it would be difficult to accept the report as reliable unless supported by multiple independent forecasts."

Energy Economics notes in response:

- The version of the Energy Economics report released to stakeholders and to the general public was abridged to exclude confidential data and detailed proprietary data, which supports the forecast. The QCA has been provided with the full version of the report.
- We note, however, that even the abridged version of the Energy Economics report includes substantial detail on the key drivers, methodology and assumptions used. On the other hand, Aurizon Network's submissions provide no substantive discussion of the rationale behind selection of 85% of contracted below-rail volumes for use in its forecasts.

4) Lack of a range or confidence interval

On page five of its submission, Aurizon Holdings writes
"Providing point estimates for such a long forecast period suggests a level of accuracy that is unreasonable. The usual practise for long-term macroeconomic forecasting is to provide a range or confidence interval, or alternatively, the averaging of multiple independent forecasts."

I refer you to our response at point 1 to the similar Aurizon Network statement.

5) Take-or-pay incentive effect and cost cutting

On page five of its submission, Aurizon Holdings writes
"*Energy Economics does not appear to incorporate the increased utilisation of rail infrastructure by producers due to downward unit cost initiatives and take-or-pay costs. Despite the low coal price environment and current margin squeeze, the size of fixed costs can incentivise coal producers to increase rather than reduce production to reduce the cost per tonne of production. This is observed in increased railings through RG Tanna over the last quarter of FY13.*

Aurizon Holdings continues:
"In the report, Energy Economics states that "Energy Economics has been more bearish than Aurizon Network in terms of the speed of development of mining projects destined to utilise the new Wiggins coal Export Terminal, and in some cases the ultimate production levels of these mines." However, in making that statement, Energy Economics appears to be discounting the incentive effect of take-or-pay charges. As soon as WICET is in operation, take-or-pay charges are expected to commence. The existence of take or pay charges is supportive of an optimistic ramp-up profile."

Energy Economics notes in response:

- We agree that take-or-pay agreements provide a strong incentive for coal producers to fulfil the tonnages that are stipulated under their rail and port contracts, but this is only one factor amongst many.

- We note that the existence of take-or-pay agreements has not guaranteed coal railings levels in the past. Take-or-pay agreements have been in place at the Port of Gladstone and at the Dalrymple Bay Coal Terminal for many years, but over the past three fiscal years for example the maximum utilisation achieved at Gladstone was 74% (in fiscal 2012) and at DBCT 73% (in fiscal 2013). We point out that these maximum port utilisation figures are well below the 85% of contract volume assumption used by Aurizon Network for its railings forecasts.

- Regardless of the incentives that take-or-pay volume agreements provide WICET shareholders, and others, to expedite development schedules for new mines, these projects cannot commence construction until environmental consents, mining permits and financing arrangements are in place. Comprehensive information regarding progress in these areas is available on Queensland Government and on mining company web sites. Our evaluation of the speed of development of the new mining projects destined to utilise the new Wiggins Island Coal Export Terminal is based on this body of information.

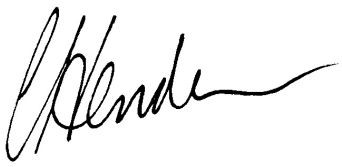
- We agree that coal mining companies will continue to attempt to increase production as part of an on-going drive to reduce unit costs. This is particularly true for smaller mining companies, whose incremental production is unlikely to change the supply-demand balance sufficiently to impact coal prices. However, it is unlikely to be a coincidence that the major mine operator in the region, BHP Billiton, has been the most proactive in terms of closing down its higher cost mines, as the resultant price support can support sales revenue from the remainder of its mines. Nevertheless, the severe cutbacks taking place in coal mining workforce numbers, contractors and other inputs impose limitations to coal production upside potential. We have endeavoured to balance all of these factors in our analysis of production and railings.

- Aurizon Holdings attributes the "increased railings through RG Tanna over the last quarter of FY13" to the above mentioned incentives to maximise production. We would suggest, however, that much of this surge in railings was the result of a catch-up in railing volumes following rail outages in the first quarter of the year. These outages affected the Moura line and the Blackwater line, both of which deliver coal to the RG Tanna Coal Terminal. There is substantial documented evidence of mine product stockpiles reaching capacity during the rail outages. For example, Wesfarmers reported[1] that at the Curragh mine "Coal production was impacted by wet weather associated with Cyclone Oswald, which significantly interrupted rail and port activity for four weeks and led to mine stockpiles reaching capacity."

[1] Wesfarmers, Quarterly Statement of Production, development and Exploration, 23 April 2013.

I trust this is of some assistance in progressing the DAAU process. Please do not hesitate to contact me if I can be of any further assistance on this or any other matter.

Yours faithfully
Energy Economics



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