

Planning Assessment Commission

Submission from Tim Buckley, Director Energy Finance Studies at the Institute of Energy Economics and Financial Analysis (IEEFA) re Warkworth Continuation Project (SSD 6464/SSD 6465)

Monday 7 September 2015

Further to the Honourable Robert Stokes, Minister for Planning's direction to the Planning Assessment Commission dated 13 August 2015, please accept this submission with respect to the Warkworth Continuation Project (SSD 6464/SSD 6465).

Key points:

1. Thermal coal prices are down more than 60% from the 2011 peak, and the forward market prices in a further decline in nominal prices till at least 2021.
2. Thermal coal import demand has declined in both 2014 and to-date in 2015.
3. IEEFA views seaborne thermal coal markets as in structural decline, meaning volumes and pricing will continue to decline over time.
4. Using current coal prices, the Warkworth Continuation has a negative net value.
5. Royalty payment estimates to the NSW government are likewise overstated.
6. The likely employment value of this project is likely to be overstated given the massive cost reduction programs being implemented by Rio Tinto and its peers.
7. Rio Tinto has proposed the Warkworth Continuation under the premise it would be the proponent, and hence would take 'ownership' of the rehabilitation program's funding and implementation. Clearly the 'dataroom' open currently for the proposed sale of Rio Tinto's NSW coal assets shows this is a false premise.

IEEFA specialises in the economic analysis of the global electricity markets. Our analysis is predicated on forecasting underlying electricity demand net of the reductions driven by increasing rates of both energy and grid efficiency gains. A **decoupling** of economic growth and electricity demand has emerged as a key variation to most electricity model forecasts in 2014/15. IEEFA also evaluates the most likely sources of incremental electricity generation – be that centralised or distributed renewable electricity, hydro, thermal or nuclear fuel based. IEEFA's analysis gives a priority to the key thermal coal import markets of China and India, which together constitute some 40% of global seaborne coal demand.

It is IEEFA's contention that thermal seaborne coal markets have entered structural decline following a peak in import demand in 2013. Demand globally was flat to down in 2014 and again down year to date in 2015. Structural decline is evidenced not just in declining volumes (with China imports down 34% year-to-date in 2015 year-on-year), but also the ongoing collapse in thermal coal pricing back down towards the longer term historic average of US\$20-40/t. The Newcastle benchmark export price for 6,000kcal benchmark thermal coal at US\$58/t currently, down over 60% from its peak in 2011 at over US\$130/t. Further, the forward markets suggest the coal price will continue to decline in nominal terms to below US\$55/t through to the end of 2021.¹

In the face of declining Chinese import demand, the coal industry has increasingly relied on strong demand growth projections for India. It is IEEFA's contention that this is misplaced optimism, as evidenced by the unexpected 11% decline year on year in thermal coal imports reported for India in July 2015. India's Energy Minister Piyush Goyal in November 2014 said he plans for India to cease importing thermal coal in 2-3 years.² Mr Goyal has subsequently elaborated and repeated this target monthly since, and the progress to-date is impressive.³

This is a part of a well conceived and ambitious transformation of the Indian electricity sector including a diversification of the sources of electricity generation, a significant uplift in grid and energy efficiency and a switch away from the growing reliance on imported thermal coal back to domestic coal production. IEEFA has examined this transformation in detail in our August 2015 report (please refer second attachment).⁴

As was detailed in the submission by the Australia Institute's Mr Rod Campbell,⁵ if the Warkworth Continuation Project were to be evaluated in the light of current and the financial market's projected thermal coal prices of US\$55-58/t, and using the current exchange rate of US\$0.71/A\$, this would give a current thermal coal price of A\$80/t free-on-board, such that the project would clearly have a negative net value.

Clearly at an A\$80/t nominal coal price, the royalties payable to the NSW Government would also be 20% lower than calculated using BAEconomics' 2014 assumptions of an A\$100/t coal price, holding everything else equal.

IEEFA would also reference the comments by Whitehaven Coal, BHP Billiton, Wesfarmers, Peabody Energy and even the proponent Rio Tinto themselves as to the dramatic cost reductions in the order of 20-30% that have been evident across the Australian coal mining sector since the peak in 2011/12. As presented at the Coaltrans Japan conference in September 2015, UBS's Global Commodity Strategist Lachlan Shaw estimated that a 30% decline in the global seaborne thermal coal cost curve from 2011

¹ <http://quotes.esignal.com/esignalprod/quote.action?symbol=NCFQ-ICE>

² <http://in.reuters.com/article/2014/11/12/india-coal-imports-idINL3N0T234F20141112>

³ <http://www.livemint.com/Politics/1n7MyaiV54dSml0TWg4SYN/250-billion-opportunity-to-invest-in-renewables-Piyush-Goy.html>

⁴ <http://ieefa.org/wp-content/uploads/2015/08/IEEFA-Indian-Electricity-Sector-Transformation-August-2015.pdf>

⁵ <http://www.tai.org.au/content/mt-thorley-warkworth-continuation-project-0> page 4

to 2015. With labour the largest component of coal mine operating costs, clearly wage estimates and staffing levels will both need to be materially lower than was estimated at the tail end of the boom years. It would be more realistic to assume wages per miner and staffing levels will be each potentially up to 20% lower than originally forecast.

Finally, it has been widely reported that Rio Tinto is currently running a dataroom for the purpose of seeking offers to buy the company's NSW coal operations.⁶ Rio Tinto has proposed the Warkworth Continuation Project under the premise it would be the proponent, and hence would take 'ownership' of both the operation and the ensuing site rehabilitation program's funding and implementation. Clearly the 'dataroom' open currently for the proposed sale shows this is a false premise. Any approval should require at the least an independent assessment and full funding of the rehabilitation liabilities. The history of Australian mining is littered with 50,000 examples of abandoned and unrehabilitated mine sites.

Rio Tinto also contends that it is not commercially viable for it to be required to fill the final void at a cost of up to \$2billion. IEEFA would suggest the Planning Assessment Commission should evaluate not just this proposed 950 hectare final void, but the cumulative effect of the multitude of voids being permitted across the Hunter Valley. The implications of acid mine drainage and risks to the watertable for decades to come should not be assumed away as too expensive. If Rio Tinto deems it commercially viable to undertake this massive coal mine, it should likewise commit to not leaving a potentially toxic 950ha 'lake' permanently behind.

In conclusion, on behalf of IEEFA, I would submit that the Planning Assessment Commission reject the Warkworth Continuation Project as too risky and where the costs outweigh the benefits.

Tim Buckley

Director Energy Finance Studies Australasia, IEEFA (tbuckley@ieefa.org)

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy and to reduce dependence on coal and other non-renewable energy resources. More here on IEEFA research: <http://ieefa.org/category/subject/reports/>

⁶ <http://www.afr.com/street-talk/rio-tinto-considers-breakup-amid-mount-pleasant-interest-20150818-gj1uzk>