

NEW SOUTH WALES MINERALS COUNCIL LTD

LEVEL 3, 12 O'CONNELL STREET, SYDNEY NSW 2000
PO Box A244, SOUTH SYDNEY NSW 1235
• T: 61 2 9274 1400 • F: 61 2 9274 1455

2 July 2009

Mr James P Cox
Chief Executive Officer
Independent Pricing and Regulatory Tribunal of NSW
PO Box Q290
QVB Post Office
Sydney NSW 1230

Dear Mr Cox

2009 IPART Review of NSW Rail Access Undertaking: Rate of Return and Remaining Mine Life Relating to the Hunter Valley Coal Network

The NSW Minerals Council (NSWMC) is writing to you on behalf of the Hunter Rail Access Task Force (HRATF), an associated group comprising all 14 Hunter Valley Coal Producers using the Hunter Valley coal rail network.

The Hunter coal producers have asked NSWMC to make this submission to IPART in relation to the Draft Report and Draft Decision for its 2009 Review of the NSW Rail Access Undertaking.

Rate of Return

In relation to the Rate of Return, NSWMC supports many of IPART's proposals in the Draft Decision and Report. In particular, NSWMC agrees with IPART's proposals regarding the risk free rate, the adjustment for inflation, the market risk premium, gearing and the debt premium.

NSWMC's points of difference concern gamma, debt raising costs, the tax rate and the choice of a WACC within the recommended range. On gamma, our view is that the evidence and analysis presented by the AER provides sufficient justification to adjust the gamma assumption used by IPART. We consider that the allowance for debt raising cost is too high given recent AER/ACCC decisions. On tax, we believe that consistency with a post tax nominal approach requires the use of an effective tax rate, given ARTC's significant capital program.

Secondly, given the weight IPART has put on regulatory stability in relation to other WACC parameters, NSWMC's view is that it is premature to include any adjustment to the market risk premium.

Thirdly, in relation to the choice of WACC within the recommended range, NSWMC agrees with IPART's draft decision that an adjustment is not required for the global financial crisis, nor to take account of asymmetric risk. Our view is that the new investment by the Australian Rail Track Corporation will be adequately remunerated if the WACC is chosen from the mid-point of the range. However, if IPART believes that the cost of underinvestment is disproportionate, we agree that this is best taken into account through the choice of a WACC above the mid point of the range.

Finally, NSWMC reiterates its view that the proposal by ARTC for a substantial increase in the Rate of Return from that determined by IPART in its 2004 Review is inconsistent with past practice and other regulatory regimes, unwarranted by the circumstances and, if accepted by IPART, would have a significant negative financial impact on Hunter coal producers.

A detailed submission in relation to these matters by our expert consultants, ACIL Tasman Pty Ltd, is attached for your consideration.



Remaining Mine Life

In relation to Remaining Mine Life, NSWMC reiterates its position that a Life of at least 30 years should be used to determine the depreciation rates to apply to the Hunter Valley Coal Network Regulatory Asset Base from 1 July 2009.

NSWMC therefore supports IPART's proposal for a 30 year Remaining Mine Life in the Draft Decision and Report. In particular, we agree with IPART's adoption of the advice provided by LECG in relation to the effect of coal chain capacity constraints; that it is invalid to exclude large new mine projects in the Gunnedah Basin; and that these factors alone indicate that the Remaining Mine Life is at least 30 years.

Secondly, NSWMC submits that there is a fundamental flaw in the approach advocated by ARTC/Booz. Their approach moves away from that adopted by IPART in its 2004 and 1999 determinations on the advice of the NSW Department of Mineral Resources i.e. that a reasonable and readily determined assessment of remaining mine life would result from dividing the current marketable reserves by the current production rate.

Instead the ARTC/Booz approach uses a forecast of dramatically increased production without also determining, on a consistent basis, the quantum of marketable reserves used to calculate the Remaining Mine Life. It does not allow for an extension of the lives of existing mines and development of new mining projects and the corresponding increase in marketable reserves that coal producers will prove up from the resource base to economically justify those mine extensions and new mining developments. It does not take into account the practice of coal producers to use capital efficiently by only expending funds to prove up reserves on their mining tenements when those reserves are needed to extend mine lives or commit to new mining developments.



The ARTC/Booz approach ignores this basic characteristic of the coal industry and the very large coal resource base in the Sydney and Gunnedah geological basins from which substantial additional and new marketable reserves can be expected to be proven in future to meet growing and longer term export market demand. An increase in marketable reserves from current levels will be a natural corollary of increased production rates in the Hunter region coal mining industry serviced by the ARTC Coal Network.

NSWMC directionally supports LECG's view that the production growth forecasts used by ARTC/Booz are excessive. They substantially exceed the historical rate of growth, the forecasts of NSWMC's expert consultant, Wood Mackenzie, and other independent third parties such as ABARE. These forecasts take into account growth in aggregate market demand rather than summing the growth aspirations of individual coal producers, each assuming it will capture available markets in preference to its peers. The ARTC/Booz forecasts, made in mid 2008, have already been superseded by significantly lower forecasts provided by all the producers to the industry logistics coordination group, the Hunter Valley Coal Chain Logistics Team, in March 2009.

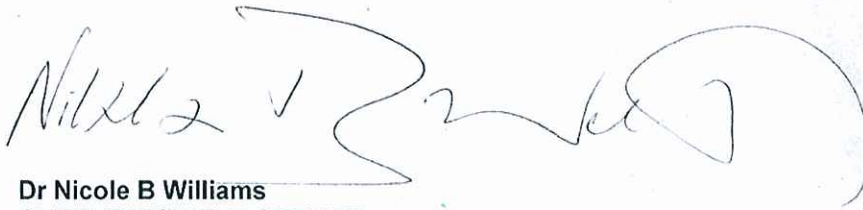
Further, NSWMC supports LECG's view that it is not valid to exclude identified potential new mine developments, such as Caroona, Watermark and Maules Creek, as ARTC/Booz have, on the grounds that they may not be developed within the five year regulatory review period or may not be developed at all. To be logically consistent, all forecast growth in production beyond, or even within the five year period should also be excluded.

In summary, NSWMC's view is that the ARTC/Booz proposal for a substantial decrease in the Remaining Mine Life from that determined by IPART in its 2004 Review is inconsistent with past practice and regulatory certainty; based on flawed future forecasts of production and reserves; and incompatible with a basic characteristic of the Hunter coal industry, that additional reserves will be proven in future from the large coal resource base serviced by ARTC's Hunter Valley Coal Network.

If accepted by IPART, the ARTC/Booz proposal would have a significant negative financial impact on Hunter coal producers by way of excessive depreciation rates, which are clearly not justified in the circumstances.

A detailed submission in relation to these matters is attached for your information. If you require any further information on these matters, please contact Mr Geoff Andrews, HRATF, on (02) 9386 9957 or an53696@bigpond.net.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Nicole B Williams', followed by a large, stylized flourish.

Dr Nicole B Williams
CHIEF EXECUTIVE OFFICER

c.c. Mr Peter O'Grady
Chair, Hunter Rail Access Task Force





Response to IPART's draft report and draft determination

On NSW Access Undertaking –
Review of rate of return and
remaining mine life

Prepared for the NSW Minerals Council

June 2009



ACIL Tasman

Economics Policy Strategy

ACIL Tasman Pty Ltd

ABN 68 102 652 148

Internet www.aciltasman.com.au

Melbourne (Head Office)

Level 6, 224-236 Queen Street
Melbourne VIC 3000

Telephone (+61 3) 9604 4400
Facsimile (+61 3) 9600 3155
Email melbourne@aciltasman.com.au

Darwin

Suite G1, Paspalis Centrepoint
48-50 Smith Street
Darwin NT 0800
GPO Box 908
Darwin NT 0801

Telephone (+61 8) 8943 0643
Facsimile (+61 8) 8941 0848
Email darwin@aciltasman.com.au

Brisbane

Level 15, 127 Creek Street
Brisbane QLD 4000
GPO Box 32
Brisbane QLD 4001

Telephone (+61 7) 3009 8700
Facsimile (+61 7) 3009 8799
Email brisbane@aciltasman.com.au

Perth

Centa Building C2, 118 Railway Street
West Perth WA 6005

Telephone (+61 8) 9449 9600
Facsimile (+61 8) 9322 3955
Email perth@aciltasman.com.au

Canberra

Level 1, 33 Ainslie Place
Canberra City ACT 2600
GPO Box 1322
Canberra ACT 2601

Telephone (+61 2) 6103 8200
Facsimile (+61 2) 6103 8233
Email canberra@aciltasman.com.au

Sydney

PO Box 1554
Double Bay NSW 1360

Telephone (+61 2) 9389 7842
Facsimile (+61 2) 8080 8142
Email sydney@aciltasman.com.au

For information on this report

Please contact:

Sue Jaffer

Telephone (03) 96003144

Mobile 0438 550214

Email s.jaffer@aciltasman.com.au



Contents

1	Introduction	1
2	WACC formulation	1
3	Individual WACC parameters	1
3.1	Risk free rate	1
3.2	Adjusting for inflation	1
3.3	Market risk premium	1
3.4	Debt margin	2
3.5	Gearing	2
3.6	Gamma	2
3.7	Tax rate	3
3.8	Equity beta	3
3.9	Choosing within a range	3



1 Introduction

This paper responds to the Draft Report and Draft Decision paper issued in May 2009 by IPART: "NSW Rail Access Undertaking - Review of Rate of Return and remaining mine life from 1 July 2009." It has been prepared on behalf the NSW Minerals Council.

2 WACC formulation

IPART proposes to continue to use a pre-tax WACC formulation and the statutory tax rate of return under the undertaking. We agree that the pre-tax real and post-tax nominal approaches give equivalent results provided a consistent approach is taken to tax. This is discussed further below.

3 Individual WACC parameters

3.1 Risk free rate

We agree with IPART's proposal to use 10 year nominal CGS yields averaged over a 20 day period to proxy the risk free rate. In particular, we agree that the AER's recent decision on the risk free rate for electricity distribution and transmission supports IPART's view that:

- There is no downward bias in nominal gilt yields
- No adjustment is appropriate for the convenience yield
- The use of 10 year securities remain appropriate
- An averaging period of 15 to 20 days is appropriate.

3.2 Adjusting for inflation

We support IPART's proposal to estimate inflation using indexed swaps, and to undertake a cross-check using the breakeven inflation rate and economists' forecasts.

3.3 Market risk premium

In its recent final decision on the review of WACC parameters, the AER adopted a market risk premium (MRP) of 6.5 per cent on the basis of evidence that the medium term MRP is currently above the long term MRP. However, the AER noted that estimates of the long-term historic average of the MRP provided a range of 5.7 to 6.2 per cent.



Given this, we agree with IPART's assessment that there is insufficient evidence to depart from its draft assumption of a range of 5.5 to 6.5. In our view, the mid point of this range, 6.0, remains an appropriate estimate of the long term MRP.

3.4 Debt margin

In the light of the AER's Final Decision on WACC parameters, we support IPART's decision to (in principle) base the debt margin on Australian corporate bonds with a maturity of 10 years (rather than 5 years). We also support the switch to Bloomberg data and the choice of a 10 to 20 day averaging period.

IPART's recently released discussion paper on the debt margin presents a thorough discussion of the practical problems involved in deriving a suitable benchmark cost of debt. The discussion paper indicates that IPART is out of line with other regulators in determining the debt margin based on a target credit rating of BBB+ to BBB. Therefore we would support a move to using BBB+ or A to BBB+ as providing a more appropriate comparison portfolio. The alternative of using a utility-based portfolio would also appear to have merit.

We consider that a debt raising cost of 8.3 basis points is appropriate, based on the AER's recent decision for SP Ausnet and the ACCC's recommendation for ARTC's interstate access undertaking.

3.5 Gearing

We support IPART's proposal to use a range for gearing of 50 to 60%.

3.6 Gamma

IPART's choice of a range for gamma of 0.3 to 0.5 is significantly out of line with regulatory practice in other jurisdictions. While the ACCC adopted a gamma of 0.5 in its decision on ARTC's interstate access undertaking, this was prior to the release of the AER's draft decision on WACC parameters. We understand that in future the ACCC is likely to adopt the AER's recommended value of point value 0.65. As a consequence, this significant discrepancy in assumption will produce a noticeable "discontinuity" in the WACC parameters underpinning ARTC's charges at the point that the ARTC comes under the ACCC's jurisdiction.

Moreover, the AER considered extensive evidence in coming to its recommended range of 0.57 to 0.74 for gamma. We believe that the evidence, and AER's in depth analysis, provides sufficient grounds for an adjustment to gamma.



3.7 Tax rate

In its earlier discussion paper IPART suggests that the calculation of the WACC on a pre-tax real or post-tax nominal basis should have little impact on the revenue outcome for the regulated business, provided the same tax rate is used. The post tax nominal approach, as used by the ACCC, takes into account the effective rate of tax for equity, with the tax cash flows being explicitly identified.

IPART proposes to use the statutory tax rate on the basis that effective and statutory tax rates will equate over the longer term. In the meantime, however, and over the forthcoming 5 year review period, ARTC's effective rate of tax is likely to be significantly lower than the statutory tax rate. We believe that it is practical to estimate an effective tax rate for ARTC that is applicable for the five year review period, in line with the approach adopted by the ACCC in its Post Tax Revenue Model.

3.8 Equity beta

We support IPART's proposal for a range of 0.7 to 1.0 for ARTC's equity beta. However we agree that it is appropriate for IPART to consider whether the AER's recent decision provides evidence of a recent fall in beta factors.

3.9 Choosing within a range

IPART identified three possible justifications for choosing a cost of capital above the mid-point of the range:

- The cost of under investment being higher than the costs of over investment
- The presence of asymmetric risks
- The impact of the global financial crisis on the ability of firms to raise capital and its cost.

The NSW Minerals Council agrees that it is important to set a cost of capital sufficient to remunerate ARTC's new investment appropriately. We believe this is achieved by setting a cost of capital at the mid-point of the WACC range. The Council agrees that the cost of under-investing in the Hunter Valley Rail Network would be substantial, but that this is equally true of many infrastructure service providers for whom the cost of capital is determined at the mid-point of the range.

We agree with IPART that there is no substantial asymmetric risk involved in serving the new mines.



ACIL Tasman
Economics Policy Strategy

Response to IPART's draft report and draft determination

We support IPART's conclusion in the Draft Determination that no adjustment is required for the global financial crisis.

**NSW MINERALS COUNCIL
HUNTER RAIL ACCESS TASK FORCE**

**SUBMISSION TO
INDEPENDENT PRICING AND REGULATORY TRIBUNAL
REGARDING
2009 REVIEW OF NSW RAIL ACCESS UNDERTAKING
REVIEW OF THE REMAINING MINE LIFE
RELATING TO THE HUNTER VALLEY COAL NETWORK**

June 2009

CONTENTS

	Page
1. Introduction	3
2. NSWMC Position	3
3. Wood Mackenzie Assessment of RML	3
4. Comparison with ARTC Proposal	5
4.1 Production Forecasts	5
4.2 Prospective Mines and Coal Reserves	6

ABBREVIATIONS USED IN THIS DOCUMENT

General

ARTC	Australian Rail Track Corporation
HVAU	ARTC's Draft Hunter Valley Access Undertaking to be submitted to ACCC
HRATF	Hunter Rail Access Task Force
HVCC	Hunter Valley Coal Chain
HVCCC	Hunter Valley Coal Chain Coordinator
HVCCLT	Hunter Valley Coal Chain Logistics Team
HVCN	Hunter Valley Coal Network
NSWMC	NSW Minerals Council
NSWRAU	NSW Rail Access Undertaking
RAB	Regulatory Asset Base
RML	Remaining mine life

1. INTRODUCTION

This paper responds to the Draft Report and Draft Decision paper issued in May 2009 by IPART: "NSW Rail Access Undertaking - Review of Rate of Return and remaining mine life from 1 July 2009." It has been prepared by the NSW Minerals Council.

2. NSWMC POSITION

NSWMC submits that a Remaining Mine Life of at least 30 years should be used to determine the depreciation rates to apply to the Hunter Valley Coal Network Regulatory Asset Base from 1 July 2009.

NSWMC therefore supports IPART's proposal for a 30 year Remaining Mine Life in the Draft Decision and Report. In particular, we agree with IPART's adoption of the advice provided by LECG in relation to effect of coal chain capacity constraints; that it is invalid to exclude large new mine projects in the Gunnedah Basin; and that these factors alone indicate that the Remaining Mine Life is at least 30 years.

NSWMC's position is based on an assessment prepared by our expert consultant, Wood Mackenzie Pty Ltd which is summarised in Sections 3 and 4 below.

Wood Mackenzie has made detailed forecasts of the production of coal from existing and new Hunter region mines and the marketable reserves used for that production over the medium term, based on supply-demand modelling. It has also assessed the potential longer term demand for Hunter region coal and supply from additional coal resources and new mine projects.

NSWMC believes this approach is the more appropriate approach to determining the RML than that proposed by ARTC/Booz. It will best reflect the circumstances applying to ARTC's Hunter Valley Coal Network over the five year regulatory period (July 2009 - June 2014), including both the existing assets and ARTC's projected investment over the period.

As set out in Sections 3 and 4 below, NSWMC's view is that the ARTC/Booz proposal for a substantial decrease in the Remaining Mine Life from that determined by IPART in its 2004 Review is inconsistent with past practice; based on flawed future forecasts of production and reserves; and incompatible with a basic characteristic of the Hunter coal industry that additional reserves will be proven in future from the large coal resource base serviced by ARTC's Hunter Valley Coal Network.

3. WOOD MACKENZIE ASSESSMENT OF RML

Wood Mackenzie's assessment of RML covers all the existing coal mines as well as a substantial number of potential future mines in the Hunter region. The region includes areas to the west of the Hunter Valley serviced by the Muswellbrook to Ulan rail line (all these mines are in the Sydney Geological Basin) and the Muswellbrook to Narrabri rail line (these mines are in the Gunnedah Geological Basin).

Wood Mackenzie's view of future coal supply from the Hunter region is an independent one based on its economic modelling of supplier costs and margins for each mine or project (using its Global Economic Model of coal prices, inflation and exchange rates) combined with its lowest cost modelling of trade flows (using its International Coal Trade Model). The current horizon of the supplier modelling is 2020 and of the trade modelling is 2025. Wood Mackenzie's modelling forecasts that

- Hunter region coal production and export profiles for the period 2008 to 2020 will be robust. Production and export volumes from 37 existing operations will continue to grow from 2008 levels and Wood Mackenzie has identified a strong outlook of 20 major new mine projects in the project pipeline
- although coal exports through the port of Newcastle are currently limited by the capacity of the logistics chain (the Hunter Coal Chain) to about 90Mtpa, new investment will lift capacity substantially
 - port terminal expansions at PWCS and NCIG will lift effective capacity to 120Mtpa in 2010 and 190Mtpa by 2015 (headline or nameplate capacity of 211Mtpa with an effective utilisation rate of 90%)
 - rail capacity expansions will lift effective capacity to 145Mtpa in 2010 and 181Mtpa from 2012

- coal exports through the port of Newcastle are forecast to grow at over 5% compound annually
 - exports will grow to about 165Mtpa by 2015 and about 175Mtpa from 2020 with all the growth coming from increased thermal coal exports
 - exports from existing operations will increase from current levels (around 90Mtpa) to over 115Mtpa in the 2012 to 2015 period
 - new projects will account for over 45% of exports by 2020
 - supply from the Gunnedah Basin will increase in importance growing from just under 5Mtpa in 2008 to around 23Mtpa in 2020, increasing its share of exports from 5% to 15%
- there is significant additional demand for Newcastle thermal coal supply in the seaborne market, particularly in the 2013-2017 period
 - any significant incremental Newcastle thermal coal supply will be taken by the market, which increases the viability of new project commencement
- production and exports will continue at 2020 levels, at least, until 2025 (the current horizon of the International Coal Trade Model)

Based on the above modelling, Wood Mackenzie's assessment of RML reflects the following forecasts of infrastructure capacity and coal production from Hunter region mines using the HVCN

- infrastructure system capacity constrained at 180Mtpa from 2013
- export production growing from around 90Mtpa in 2009 to around 175Mtpa in 2020 and maintaining that level to 2025 (the current model horizon)
- Sydney Basin projects accounting for 78% of the production growth from new projects by 2020
- supply from the Gunnedah Basin emerging in importance in the 2016-2020 period and accounting for 22% of new project production by 2020 (17Mtpa). The three 'prospective mines' excluded from the ARTC/Booz preferred case, Caroona, Maules Creek and Watermark, account for over 75% of the forecast production from the Gunnedah Basin by 2020.

Wood Mackenzie's assessment of RML is also based on its independent assessment of the current coal reserve base. The reserve base is significant and is dominated by thermal coal reserves and by existing operations rather than emerging projects

- marketable reserves for the existing mines and projects in the production forecasts currently total 3.8 billion tonnes comprising 3.2 billion tonnes of thermal coal and 600 million tonnes of metallurgical coal
- marketable reserves, particularly from emerging projects and in the Gunnedah Basin, are expected to eventually be much larger

At Wood Mackenzie's production rates, even the currently estimated marketable reserves of 3.8 billion tonnes would last for approximately 24 years.

However, Wood Mackenzie's view is that, as time passes and the reserves of existing mines and currently identified projects start to deplete, extensions of their marketable reserves will be identified from the other coal resources on the leases and new mining tenements. In addition, new coal mining projects will be identified from the large, as yet unproven coal resources to the west of the Hunter Valley, particularly in the Gunnedah Basin. While these additional marketable reserves and additional new mining projects have not yet been delineated and proven, it is likely that they will extend the RML of Hunter region coal to at least 30 years.

NSWMC submits that it is appropriate to allow for such additional reserves and new projects, based on additional coal resources, because this reflects the nature of the coal resource definition and development. The term of most mining leases is 20 years and the delineation of additional marketable reserves is often not undertaken until a lease extension is to be sought. Similarly, prospective coal producers do not outlay the large technical and financial resources needed to fully delineate and prove up reserves for a new project from the resource base and plan the project until there is some prospect that the project will be developed in the medium term.

The history of the Hunter region coal industry is that there are often extensions of reserves delineated at existing mines which extend their lives considerably and that, when market opportunities are in prospect, new resources and projects will be identified.

This approach is compatible with the NSW Rail Access Undertaking (NSW RAU), which provides for the useful life of the relevant rail infrastructure to be determined with reference to the remaining mine

life of the mines using the network. It is clear that "mines using the network" must include not only mines currently using the network but also new mines, based on additional marketable reserves identified from the resource base, which will use the network when they come into production.

4. COMPARISON WITH ARTC PROPOSAL

The RML proposed by ARTC/Booz of 22.8 years is weight averaged by production and reflects near term infrastructure capacity constraints; very rapid infrastructure expansion and high subsequent coal production levels; and the exclusion of three prospective mines in the Gunnedah Basin and other potential mining projects and resources in the Hunter region.

However, NSWMC directionally supports LECG's view that the production growth forecasts used by ARTC/Booz are excessive. They substantially exceed the historical rate of growth, the forecasts of Wood Mackenzie and other independent third parties such as ABARE. These forecasts take into account growth in aggregate market demand rather than summing the growth aspirations of individual coal producers, each assuming it will capture available markets in preference to its peers. The ARTC/Booz forecasts, made in mid 2008, have already been superseded by significantly lower forecasts provided by all the producers to the industry logistics coordination group, the Hunter Valley Coal Chain Logistics Team, in March 2009.

NSWMC also supports LECG's view that it is not valid to exclude identified potential new mine developments, such as Caroona, Watermark and Maules Creek, as ARTC/Booz have, on the grounds that they may not be developed within the five year regulatory review period or may not be developed at all. To be logically consistent, all forecast growth in production beyond, or even within the five year period should also be excluded. Moreover, potential future increases in marketable coal reserves in existing mines and new developments, delineated from the large coal resources in both the Sydney and Gunnedah Basins, should be recognised in the determination of the Remaining Mine Life.

NSWMC's views on the production rate forecasts assumed by ARTC/Booz and their treatment of prospective mines and coal reserves are set out in more detail in Sections 4.1 and 4.2 below.

4.1 Production Forecasts

The basis of NSWMC's proposed RML, of at least 30 years, in Section 3 above highlights the deficiencies in the ARTC/Booz submission in relation to forecasts of future production rates for mines using the HVCN. NSWMC submits that

- it is not appropriate to assume, as ARTC/Booz appear to have done, a production rate beyond the maximum planned capacity of the current port terminals, PWCS and NCIG, which is limited by the space available. This is potentially 211Mtpa from 2013 at the earliest although, at this stage, only investment projects to expand total capacity to 143Mtpa have been committed by the terminal owners. Even assuming the further investments are committed, Wood Mackenzie estimates the effective capacity will only be 90% of the headline or nameplate capacity, i.e. 190Mtpa, from 2015.
- it is also not appropriate to assume a production rate beyond the effective rail track capacity that will result from ARTC's investment in the five year regulatory period. This capacity is not clear from the ARTC/Booz Submission or ARTC's response to IPART's query on this matter in January. It could be that the capacity resulting from that investment will be lower than the port terminal capacity. Current track capacity appears to be limited to about 100Mtpa and even assuming ARTC makes the large investments planned, Wood Mackenzie estimates the effective capacity will only be about 180Mtpa, from 2012.
- finally, it is possible that production will be less again than the infrastructure capacity, at least in the short to medium term. Wood Mackenzie estimates that production will grow to 165Mtpa by 2015 and 175Mtpa from 2020. ABARE's projections are of a similar order of magnitude and both projections are more consistent with historical export growth rates than the apparent ARTC/Booz forecast.

Moreover, it has been difficult to ascertain the forecast production rates assumed in the ARTC/Booz Submission.

- Figure 3 of the Booz Submission in December 2008 shows Coal Chain infrastructure capacity growing to about 240Mtpa by 2013 and 260Mtpa by 2023 based on the assumption that "both the NSW Government and the coal industry will work to ensure that the Hunter coal chain capacity

will be capable of meeting demand". The implication was that production will grow to levels approaching this capacity.

- In response to IPART's query on behalf of NSWMC in January, ARTC provided a graph of the forecast level of coal production moving to Newcastle on the HVCN "during the regulatory period" that it assumed in the RML calculation. The graph showed the annual production increasing from about 110Mtpa in 2009 to about 245Mtpa in 2014, including about 110Mtpa coming from the Muswellbrook to Ulan and Muswellbrook to Narrabri lines.
- In the IPART Roundtable on 1 April, ARTC said that the graph in its December Submission showed "capacity, not necessarily the forward production". ARTC said it thought the highest production got to was 211Mt.
- In its submission on 9 April, ARTC said that, for the option excluding the Caroona, Maules Creek and Watermark developments, the annual level of production reaches 211Mtpa in 2013 and when these three projects were included the annual production level reaches about 230Mtpa in 2016.

Moreover, it appears the individual producer forecasts on which ARTC/Booz based their mine life forecasts were made by producers in mid 2008, the height of the boom in the coal market. NSWMC understands that March 2009 producer forecasts are significantly lower, totaling about 190Mtpa in 2013 and only reaching 220Mtpa by 2018. It is possible that future individual producer forecasts will be lower again, as market demand in the wake of the global economic downturn becomes clearer and coal producers are required to firmly contract future infrastructure capacity under the new arrangements for access to the port terminals commencing in the second half of this year.

NSWMC submits that, although the total annual production levels over the period assumed by ARTC/Booz in its submission are not clear, they are certainly significantly above the potential infrastructure capacity and Wood Mackenzie's independent forecasts of total production based on its detailed supply /demand modeling over the period. Assuming a more realistic production forecast, the RML will be significantly longer.

4.2 Prospective Mines and Coal Reserves

Section 3 of this submission also highlights the deficiencies in the ARTC/Booz submission in relation to new projects and marketable reserves in the Hunter region. NSWMC submits that the prospective marketable reserves at existing mines and new mining developments are understated in the assessment by ARTC/Booz. NSWMC submits that

- the prospective mines at Caroona, Maules Creek and Watermark, excluded by ARTC/Booz, should be included in the determination of RML. Including these mines would increase increases the proposed ARTC/Booz RML to from 22.6 to 25.5 years, even at the production rates assumed by ARTC/Booz.
- other marketable reserves, at existing mines and the other 17 prospective mines so far identified by Wood Mackenzie and not included in the ARTC/Booz Submission, should be included in the determination of RML. Including these reserves and using a more realistic production forecast can be expected to extend the RML to at least 30 years.

Further, NSWMC submits that, consistent with Wood Mackenzie and the NSWMC view, there is a fundamental flaw in the approach advocated by ARTC/Booz. The ARTC/Booz approach moves away from the approach adopted by IPART in its 2004 and 1999 determinations on the advice of the NSW Department of Mineral Resources i.e. that a reasonable and readily determined assessment of remaining mine life would result from dividing the current marketable reserves by the current production rate.

Instead, the ARTC/Booz approach uses a forecast of dramatically increased production without also determining, on a consistent basis, the quantum of marketable reserves to be used in calculating the Remaining Mine Life. It does not allow for an extension of the lives of existing mines and development of new mining projects, with the corresponding increase in marketable reserves that coal producers will prove up from the resource base to economically justify those mine extensions and new mining developments. It does not take into account the practice of coal producers to use capital efficiently by only expending funds to prove up reserves on their mining tenements when those reserves are

needed to extend mine lives or commit to new mining developments.

The ARTC/Booz approach ignores this basic characteristic of the coal industry and the very large coal resource base in the Sydney and Gunnedah geological basins from which substantial additional and new marketable reserves can be expected to be proven in future to meet growing and longer term export market demand. An increase in marketable reserves from current levels will be a natural corollary of increased production rates in the Hunter region coal mining industry serviced by ARTC's Hunter Valley Coal Network.

