



**Idemitsu Australia Resources Pty Ltd**

ABN 45 010 236 272  
Level 28, 10 Eagle Street  
Brisbane, QLD 4000 Australia  
GPO Box 1127, Brisbane QLD 4001 Australia  
TEL +61-7-3222-5600 FAX +61-7-3222 5665

1 September 2014

Mr Matthew Schroder  
General Manager  
Fuel, Transport and Prices Oversight Branch  
Australian Competition and Consumer Commission  
GPO Box 520  
Melbourne Vic 3001

(By email: [transport@acc.gov.au](mailto:transport@acc.gov.au))

Dear Mr Schroder

**Revenue Allocation Review (ACCC Discussion Paper) - ARTC's Hunter Valley Rail Network Access Undertaking**

Idemitsu Australia Resources Pty Ltd (**Idemitsu**) welcomes the opportunity to provide the following submission in regards to the Discussion Paper issued (29 May 2014) by the Australian Competition and Consumer Commission (**ACCC**) in relation to Australian Rail Track Corporation's (**ARTC**) approach to revenue allocation under the Hunter Valley Rail Network Access Undertaking (**HVAU**).

Idemitsu is an active coal producer with mines located in both the Hunter Valley (Pricing Zone 1 – **PZ1**) and the Gunnedah Basin (Pricing Zone 3 – **PZ3**). Idemitsu is uniquely positioned to comment on this matter as it is the only producer in the Hunter Valley Coal Chain which currently has operating mines in both PZ1 and PZ3.


Idemitsu note that the purpose of the review is *"to assess the level and adequacy of, transparency of information provided to stakeholders on ARTC's current revenue allocation processes"* (ACCC discussion paper). Idemitsu supports transparency and would welcome some improvements to the information provided by ARTC. Idemitsu note that some stakeholders have sought outcomes from the review which extend well beyond the ACCC's stated purpose, by proposing amendments to the way in which ARTC allocates revenue. In Idemitsu's view:

- The current approach is consistent with the approved HVAU.
- It is inappropriate to (as some stakeholders propose) seek to force ARTC to amend the undertaking during its approved term, and worst still to suggest implementing changes with retrospective effect.
- Most importantly, the current approach is aligned with the objects of Part IIIA of the Competition and Consumer Act 2010 (Cth) (the **Act**) as it promotes the economically efficient use of and investment in infrastructure and promotes competition in coal markets. The approach is also appropriate taking into account the legitimate business interests of ARTC, ARTC's investment in the facility (specifically the PZ3 infrastructure), and the public interest, including the public interest in having competition in markets. Therefore, the current approach ought not to be changed in future undertakings.
- The current approach has promoted, and is continuing to promote, investment in mines and rail infrastructure in PZ3, which is in the public interest and is ultimately in the interests of other users of the network. The current approach is achieving desirable outcomes, just as it did when applied to Pricing Zone 2 (**PZ2**).

The initial part of this submission contains Idemitsu's views on the revenue allocation undertaken by ARTC and supplemented by a Submission Report (the **Report**) compiled by PwC Strategy& (formerly Booz & Company) (**Strategy&**) contained in Attachment 1. Strategy& are economic and regulatory consultants engaged jointly by Idemitsu and Whitehaven Coal Ltd. Finally, Idemitsu has provided responses to ACCC's specific questions in the Discussion Paper.

Should you have any queries regarding this submission or would like to discuss this matter further please do not hesitate to contact Mr Craig Forster (Ph +61 7-3222 5623)

Yours sincerely

A handwritten signature in black ink, appearing to read 'Lee Gordon', written in a cursive style.

Lee Gordon

General Manager Marketing and Logistics  
Idemitsu Australia Resources Pty Ltd

## Idemitsu Submission

### ARTC Hunter Valley Rail Access Undertaking – Access Revenue Allocation

#### 1. Introduction

Idemitsu is an active coal producer located in both the Hunter Valley (Pricing Zone 1 – **PZ1**) and the Gunnedah Basin (Pricing Zone 3 – **PZ3**) utilising the current Hunter Valley Rail Network (**Network**), as defined in the HVAU to haul coal from its load points to the port of Newcastle. Idemitsu is uniquely positioned to comment on this matter as it is the only producer in the Hunter Valley Coal Chain which currently has operating mines in both PZ1 and PZ3.

The ACCC published a Discussion Paper on the 29 May 2014, seeking stakeholder views in regards to the level and adequacy of transparency of information provided to stakeholders on ARTC's current revenue allocation practices<sup>1</sup>. Idemitsu would like to note any proposed change to the current ARTC revenue allocation approach would be out of scope of this review.

As outlined in the Report<sup>2</sup>, Gunnedah Basin Access Holders face a number challenges with respect to competitiveness and growth mainly due to:

- longer haul distances;
- rail infrastructure restrictions (i.e. single track, axle load, banking requirements, aged infrastructure etc.); and
- limitation on rolling stock configurations (i.e. unable to use the proposed Final Indicative Service).

These challenges lead to significantly higher rail transport costs than mines located in PZ1.

The Pricing Principles of the HVAU is outlined in Section 4; ARTC levies access charges on a gross tonne kilometre (gtkm) basis on all Access Holders who transit the Network. These charges are broken down between Take or Pay (TOP) and Non Take or Pay (Non TOP). The TOP charge covers the Fixed Costs (or Common Costs including new capital) and the Non TOP covers the Variable Costs or the Direct Costs that an Access Holder imposes on a Segment within a Pricing Zone of the Network. In the case of PZ3 Access Holders, the TOP charges incurred in PZ1 (which do not include Direct Costs) are allocated back to PZ3 to assist in the recovery of the Economic Costs, effectively reducing ARTC's capitalised losses in PZ3. Upon completion of this revenue allocation, the Annual Compliance assessment is conducted in regard to the Constrained Network (PZ1 and PZ2) to determine over or under recovery of access revenue. ARTC has advised that this approach to revenue allocation is the result of applying the combinatorial model<sup>3</sup>. In the case of the Annual Compliance assessment in PZ3, the HVAU permits ARTC to use Loss Capitalisation to recoup any access revenue under recovery (whilst unconstrained). (Refer Sections 2.3 and 2.4 of the Report).

It should be noted the revenue allocation approach used by ARTC is not a permanent arrangement and only exists whilst PZ3 is unconstrained. ARTC has forecast full recovery of PZ3 Economic Costs and PZ3 Access Holders contributing to PZ1 Common Costs (in addition to the Direct Costs) in the near future.

Idemitsu notes a number of stakeholder submissions from PZ1 Access Holders have questioned and opposed this approach by ARTC and further linked this review to the 2013 Annual Compliance assessment currently before the ACCC for determination.

However the ACCC has acknowledged:

---

<sup>1</sup> ACCC Discussion Paper – ARTC Revenue Allocation Review, 29 May 2014, (p5).

<sup>2</sup> Access Revenue Allocation, Strategy&, August 2014, paragraphs 10 – 11 (p4).

<sup>3</sup> ACCC Determination – ARTC's compliance with the financial model and pricing principles in the Hunter Valley Coal Network Access Undertaking for January – December 2012, 24 March 2014, (p21).

*The HVAU does not specify how revenue from the charges is to be allocated to particular Pricing Zones or Segments for the purposes of compliance with the combinatorial matrix in sections 4.2 and 4.3 of the HVAU.*

ARTC has not breached the HVAU and is applying revenue allocation practices which are in ARTC's legitimate business interests and best achieve the objects of the Act.

## **2. Regulatory Objectives**

Given the context of the extremely difficult market conditions faced by the Australian coal industry, it is expected there will be a number of emotive submissions from stakeholders. Idemitsu consider any proposed changes to the HVAU should be considered only in the context of the next undertaking which will apply following the expiry of the current HVAU (30 June 2016).

Any new undertaking must be assessed by the ACCC taking into account the matters set out in Section 44ZZA (3) of the Act. Idemitsu discuss the question of revenue allocation in the context of each of those matters below and note the benefits of the current approach outlined in the Report (section 3.1).

### **2.1. 44ZZA(3)(aa)**

Matter to be considered: *"The objects of this Part", which are to "promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets; and to provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry".*

The HVAU has been in operation for approximately three years. During this time there has been significant investment in the Hunter Valley Coal Chain, including the Gunnedah Basin. Gunnedah Basin volumes have grown from approximately 8Mtpa in 2010 to approximately 18Mtpa forecast in 2014, all under binding Access Holder Agreements. Further growth is possible with Maules Creek, Watermark and Caroon at varying stages of planning (some very advanced), and expansions being planned and almost completed at existing mines (e.g. Idemitsu's Boggabri mine).

ARTC has made investments to support this growth based on the principles of the HVAU and has at least to some extent relied on the revenue allocation process to address its investment risks in PZ3. Had ARTC been unable to allocate the revenue contributed by PZ3 producers in the way that it has, then some combination of the following would have occurred:

- ARTC incurring additional capitalised losses and facing increased, unacceptable investment risks, which may have resulted in decisions to limit further investment in PZ3 infrastructure; and/or
- ARTC increasing its charges in PZ3 to reduce capitalised losses, discouraging coal sector investment and growth in this region.

It is evident ARTC's approach has stimulated coal production in the Gunnedah Basin, which has promoted competition in international coal markets. The approach:

- has increased utilisation of the PZ3 infrastructure, which will ultimately lower the unit cost of access in PZ3 and result in the efficient use of these assets;
- has reduced barriers to entry for new participants in PZ3; and
- will underwrite the long term efficient utilisation of PZ1 infrastructure, as coal resources in PZ3 will support ongoing utilisation of PZ1 assets as the reserves of the more mature PZ1 mines decline.

ARTC in its Hunter Valley Corridor Strategy document has identified the Gunnedah Basin as one of the primary coal growth areas in NSW. This growth is expected to be a significant contributor to the

sustainability and longevity of the NSW coal industry (and therefore infrastructure utilisation) into the future.

ARTC's approach to revenue allocation was successful when applied to PZ2 in the past, and it is again proving effective in PZ3, as demonstrated by the recent strong growth achieved in this corridor, with a number of new and existing coal projects currently at advanced stages of development. A change in approach at this stage would put further investment by ARTC and the coal producers at risk.

In summary, ARTC's approach is promoting economically efficient use of and investment in infrastructure, and is promoting effective competition in coal markets.

## **2.2. 44ZZA(3)(ab)**

Matter to be considered: *"the pricing principles specified in section 44ZZCA"*.

ARTC's approach to revenue allocation is consistent with the pricing principles specified in section 44ZZCA. In particular, Idemitsu notes that item (b) provides that *"the access price structures should allow multi-part pricing and price discrimination when it aids efficiency"*. Although PZ3 producers pay an approved Access Charge which is partly calculated by reference to the distance travelled in PZ1, Idemitsu understand the view of some stakeholders that the allocation of this revenue to PZ1 results in PZ3 Access Holders effectively paying only the Direct Costs of PZ1. To the extent that this can be characterised as price discrimination, Idemitsu consider that it is price discrimination which aids efficiency, for the reasons set out in the preceding section.

Idemitsu notes some stakeholders have referred to the revenue allocation approach as a cross subsidy, which Idemitsu do not agree is the case. PZ1 and PZ2 Access Holders are not being charged higher Access Charges (beyond the cost which would have applied in the absence of PZ3 Access Holders) in order to subsidise PZ3 Access Holders. PZ3 Access Holders are effectively (after revenue allocation) paying their Direct Costs within PZ1. Also, ARTC has provided supporting forecasts which demonstrate that PZ3 Access Holders will be making a contribution to PZ1 beyond Direct Costs in the near future.

## **2.3. 44ZZA(3)(a)**

Matter to be considered: *"the legitimate business interests of the provider"*.

ARTC's submission explains why the current approach to revenue allocation is in ARTC's legitimate business interests<sup>4</sup>. In the event that ARTC was unable to allocate revenue to PZ3, ARTC would be required to either accumulate higher capitalised losses, or increase charges to PZ3 Access Holders. The former option creates risks for ARTC that the capitalised loss will not be recovered in an acceptable manner, while the latter option will dis-incentivise growth in PZ3, impact on the economics of existing operations, and increase the risk of assets in this PZ3 being stranded.

## **2.4. 44ZZA(3)(b)**

Matter to be considered: *"the public interest, including the public interest in having competition in markets (whether or not in Australia)"*.

Idemitsu have previously discussed the extremely positive effect which ARTC's approach to revenue allocation has on competition in the coal market. However, the public interest benefits of promoting growth in the Gunnedah Basin extend well beyond the promotion of competition, including:

- Promoting efficient utilisation of PZ3 infrastructure.
- Providing long term secure demand for PZ1 infrastructure.

---

<sup>4</sup> ARTC submission to ACCC Discussion Paper, August 2014, (p100).

- Providing employment growth.
- Increasing royalties and other taxes for the State and Commonwealth Governments.
- Funding significant upgrades of rail infrastructure which has provided more reliable passenger services for North Western NSW and made freight services more efficient.

Significant contributions to local communities; these go to the viability of the local communities, not only creating employment opportunities but also promoting development and sustainability of local infrastructure.

### **2.5. 44ZZA(3)(c)**

Matter to be considered: *“the interests of persons who might want access to the service”*.

ARTC’s approach to revenue allocation is in the interests of persons who might want access to services in PZ3 or in PZ1, as it promotes growth in demand which will ultimately lead to lower access charges due to declining marginal costs. In addition, access seekers in PZ3 may be unable to secure capacity if a change in the approach results in ARTC being unwilling to invest (or Access Charges are prohibitive for entry in PZ3).

### **2.6. 44ZZA(3)(da)**

Matter to be considered: *“whether the undertaking is in accordance with an access code that applies to the service”*.

It is Idemitsu understanding there is no access code relevant to the HVAU.

### **2.7. 44ZZA(3)(e)**

Matter to be considered: *“any other matters that the Commission thinks are relevant”*.

Sections 3 to 6 below address a range of matters which Idemitsu consider the ACCC ought to consider as relevant. These include:

- Regulatory Stability
- Regulatory Precedents
- Longer Term View
- Other Jurisdictions

## **3. Regulatory Stability**

The HVAU is the result of an extensive consultation and negotiation process between Hunter Valley coal producers and ARTC which in conjunction with the Capacity Framework and the implementation of the Hunter Valley Coal Chain Coordinator has successfully promoted:

- the efficient use of coal chain assets;
- the removal of coal chain constraints;
- strategic investment decisions for coal chain assets;
- a coordinated planning approach;
- security of contractual entitlements; and
- commercial confidence.

The HVAU has been operating since June 2011. Changing the current ARTC approach to revenue allocation mid-term (as suggested by some stakeholder submissions) will have serious effects on

Access Holders as well as erode the significant improvements which have been achieved in the Hunter Valley Coal Chain in recent years including improved efficiency and commercial certainty.

Further, it would be grossly inappropriate to alter a specific element of the HVAU without conducting a full review of related issues. For example, Idemitsu would strongly suggest that the (unusual) lack of a 'distance taper' in the HVAU ought to be reconsidered in the event that the revenue allocation approach is revised to the detriment of the longer-haul Gunnedah Basin mines.

Idemitsu has had the confidence, based on the terms of the HVAU and ARTC's implementation of those terms, to make significant capital investment decisions (including the underwriting of service provider investments jointly with the other PZ3 Access Holder). Examples include:

- (a) the expansion of its existing mining operations at Boggabri, including significant mine infrastructure estimated at [REDACTED];
- (b) rail infrastructure 30 tonnes axle load upgrade estimated at \$150M;
- (c) other rail infrastructure projects forecast for completion in PZ3 based upon contracted and prospective volume estimated at \$307M<sup>5</sup>;
- (d) recently approved RAB addition to PZ3 of approximately \$323M (valued at 1 January 2013); and
- (e) the evolution of current rollingstock payloads from 3000t to 8000t estimated to be \$365M.

The above examples exclude the sunk cost of prior rail infrastructure investment in the Gunnedah Basin.

A number of the above capital investments in PZ3 have provided direct downstream capacity benefits for PZ1 Access Holders through more efficient use of infrastructure resulting in the liberation of coal chain capacity.

The need for regulatory stability is essential for the development, competitiveness and sustainability of the NSW coal industry. It provides confidence for ARTC and Access Holders to continue to invest in the NSW coal industry, which is critical to the NSW and Australian economies.

Some stakeholders have proposed retrospective adjustments to prior year's Annual Compliance assessments in relation to the unders and overs. Idemitsu notes the HVAU does not permit such a retrospective adjustment and in doing so would be grossly inappropriate and destroy the regulatory confidence of Access Holders.

#### **4. Regulatory Precedents**

It is Idemitsu's understanding based upon information provided by both the ACCC and ARTC that the practice of revenue allocation has been a long standing and accepted practice for PZ3 (and PZ2) under the NSW Rail Access Undertaking (NSWRAU), regulated by the Independent Pricing and Regulatory Tribunal (IPART) since the early 2000's.

This review has originated as a result of the ACCC's final determination and subsequent approval of the 2012 Annual Compliance<sup>6</sup> submission provided by ARTC. During the determination process it was identified ARTC had continued the same revenue allocation process into the HVAU as was performed under the NSWRAU. This is in addition to the Loss Capitalisation mechanism exclusively applied in PZ3.

Section 4.10 of the HVAU provides for the ACCC to determine whether ARTC's calculations in regards to the reconciliation of access revenue are in accordance with the HVAU. In addition the ACCC notes

<sup>5</sup> 2014-2023 Hunter Valley Corridor Capacity Strategy, July 2014, (p32).

<sup>6</sup> ACCC Determination – ARTC's compliance with the financial model and pricing principles in the Hunter Valley Coal Network Access Undertaking for January – December 2012, 24 March 2014.

the HVAU does not specify how revenue is to be allocated to particular pricing zones for compliance with the revenue cap<sup>7</sup>. The ACCC noted in its determination that:

*... the ACCC is satisfied that ARTC has complied with the HVAU financial model for the period under review.*

Idemitsu would like to point out the practice of revenue allocation from PZ1 to PZ3 as part of the revenue reconciliation process has been present since the inception of the HVAU on 30 June 2011 and was accepted and approved by the ACCC as part of the 2011 Annual Compliance assessment (for the period 1 July to 31 December 2011) and contained in the confidential financial models provided by ARTC to the ACCC.

As part of the Annual Compliance Assessment section 2 Schedule G of the HVAU clearly outlines the information required to be provided by ARTC to the ACCC in relation to access revenue, full economic cost, total unders and overs and comparative values for previous review periods. These concepts are further supported by Schedule G section 2(c):

*(ii) an explanation of the assumptions and methodology used to derive the above values, and any changes made since the previous review period;*

*(iii) the spreadsheet or other model underlying calculations relevant to reconciliation of Access revenue with the applicable Ceiling Limit and calculation of any allocation of the total unders and overs amounts to the Constrained Coal Customers (not for publication) which should clearly indicate which Segments formed part of the Constrained Network for the review period.*

This would indicate to Idemitsu that there has been sufficient information and consultation provided to enable the ACCC to raise any concerns regarding the revenue allocation process previously. Furthermore, the ACCC has approved the 2011 and 2012 Annual Compliance Assessments, which contained the revenue allocation approach.

## **5. Longer Term View**

It would appear from the Position Paper that the ACCC has linked this review to the 2012 Annual Compliance Assessment (comments made by the ACCC in its determination) and thus considered a short term view of the revenue allocation approach by ARTC.

Idemitsu does not agree with a short term view and supports the ARTC's position of evaluation over a longer term<sup>8</sup>. Given the nature of the infrastructure investments which have occurred in the Hunter Valley Coal Chain, this longer term approach would seem appropriate.

Historically, the same revenue allocation approach was successfully applied in PZ2 which has enabled PZ2 to transition from unconstrained to constrained in 2007-08. Prior to 2007-08, PZ2 volumes were insufficient to recover the Economic Cost for PZ2 and they made no contribution to PZ1 Fixed Costs. ARTC has advised during the period 2007-08 to 2013 the most significant growth has occurred in PZ2, which has triggered investments in both PZ1 and PZ2 to accommodate the PZ2 growth<sup>9</sup>.

The development of PZ3 is identical to that previously experienced by PZ2. ARTC has provided forecast estimates in which the growth in PZ3 volumes are expected to be sufficient to recover PZ3 Fixed Costs in 2015 as well as recovering losses up to 2014 which have been capitalised. Based upon the continued growth profile of PZ3 volumes, from 2016 PZ3 Access Holders will begin making a contribution to PZ1 Fixed Costs. Initially this is expected to be approximately 5% of total PZ1 Fixed

<sup>7</sup> ACCC Determination – ARTC's compliance with the financial model and pricing principles in the Hunter Valley Coal Network Access Undertaking for January – December 2012, 24 March 2014, (p20).

<sup>8</sup> ARTC submission to ACCC Discussion Paper, August 2014, (pp11).

<sup>9</sup> ARTC submission to ACCC Discussion Paper, August 2014, (pp14).



Costs, increasing to 15-20% by 2020, which aligns with PZ3 Access Holder's use of PZ1<sup>10</sup>. Based upon these forecast it would suggest the revenue allocation approach will no longer be required from 2016.

It should be noted PZ1 and PZ2 Access Holders make no contribution to any of the costs in PZ3.

When considering the long term whole of coal chain view, ARTC have provided some compelling data which supports revenue allocation as an efficient and equitable approach to developing a pricing zone. The table below has been compiled from the ARTC submission<sup>11</sup>:

Period 2007-08 to 2020	Hunter Valley Coal Network	PZ1 + PZ2	PZ3
Volume	97Mtpa	75Mtpa	22Mtpa
% Share		77%	23%
Investment	\$1.93B	\$1.4B	\$0.50B
% Share		75%	25%

The above table indicates PZ3 Access Holders will be paying for 25% of the investment in the Network and utilise 23% of the capacity related to those investments for the period 2007-08 to 2020.

Idemitsu notes that some stakeholders suggest retrospectively adjusting previous unders and over accounts. From an equity perspective, Idemitsu assume that such a suggestion would extend to reversing the benefits of the revenue allocation process which accrued to PZ2 over many years during its development phase. Idemitsu considers the case against retrospective changes to the application of the undertaking to be self-evident.

## 6. Other Jurisdictions

In the attached Report (section 2.6), examples of different approaches to achieving economic efficiency objectives throughout various regulatory jurisdictions. Many of these examples correlate with ARTC's treatment of Gunnedah Basin access revenue in terms of taking into account capacity to pay and recovering Direct Costs and reduced contributions to Common Costs. In addition, haul distance is a relevant consideration, with a 'distance taper' applied in many of these jurisdictions. Distance tapers are commonly applied because:

- they are, to some extent, cost reflective; and
- they encourage growth in regions which might otherwise fail to develop due to the high cost of access.

The distance taper feature is absent from the HVAU, and is arguably unnecessary due to ARTC's consideration of capacity to pay when determining PZ3 Access Charges. However, in the event that revenue allocation practices were altered, and if ARTC was unwilling to capitalise larger PZ3 losses, Idemitsu consider the concept of a distance taper would require a thorough assessment.

## 7. Conclusion

In Idemitsu's view:

- (a) The current approach is consistent with the approved HVAU.

<sup>10</sup> ARTC submission to ACCC Discussion Paper, August 2014, (pp14).

<sup>11</sup> ARTC submission to ACCC Discussion Paper, August 2014, (pp15).

- (b) It is inappropriate to (as some stakeholders propose) seek to force ARTC to amend the undertaking during its approved term, and worst still to suggest implementing changes with retrospective effect.
- (c) Most importantly, the current approach is aligned with the objects of Part IIIA of the Competition and Consumer Act 2010 (Cth) as it promotes the economically efficient use of and investment in infrastructure and promotes competition in coal markets. The approach is also appropriate taking into account the legitimate business interests of ARTC, ARTC's investment in the facility (specifically PZ3 infrastructure), and the public interest, including the public interest in having competition in markets. Therefore, the current approach ought not be changed in future undertakings.
- (d) The current approach has promoted, and is continuing to promote, investment in mines and rail infrastructure in PZ3, which is in the public interest and is ultimately in the interests of other users of the Network. The current approach is achieving desirable outcomes, just as it did when applied to PZ2.

## Responses to the ACCC's Questions

### **1. What information has ARTC provided to stakeholders about its allocation practices?**

ARTC has conducted various consultations prior to the implementation of the HVAU, both with industry and individual Access Holders, which provided access holders with the opportunity to engage with ARTC regarding relevant HVAU matters.

Based upon information provided by ARTC in its submission regarding the revenue allocation process, Idemitsu understands it is a practice that has historical precedence in previous undertakings which has been reviewed by previous regulators.

As a result of previous consultations by the ACCC, Idemitsu understands the ACCC has received, confidential financial models and other relevant information from ARTC which has identified the revenue allocation approach. This confidential information has been critical in the ACCC making determinations on the Annual Compliance Assessments for 2011 (part year) and 2012.

Idemitsu is reliant upon the ACCC as regulator of the HVAU to provide timely advice in respect of any concerns relating to this confidential information and any other HVAU matters.

### **2. To the extent that ARTC has provided information on revenue allocation, has it been sufficient to understand how ARTC allocates revenue across Segments of the Network?**

Idemitsu supports the ongoing engagement and consultation by ARTC with all relevant stakeholders including the ACCC to ensure a comprehensive understanding for stake holders and appropriate application of the underlying principles of the HVAU.

The conduct of this review will assist all stakeholders improving their understanding of the revenue allocation approach implemented by ARTC.

Despite the submissions of some stakeholders, Idemitsu presumes a number of stake holders should have been aware of the revenue allocation approach by ARTC as it has been previously applied to their pricing zone to enable growth and competition within the Hunter Valley Coal Chain.

### **3. Do stakeholders consider they have sufficient information about ARTC's revenue allocation/reconciliation process to make informed business investment decisions? If not, please provide reasons why?**

Idemitsu welcomes the opportunity to receive more transparent information in relation to the HVAU given its complex nature, particularly in the context and for the purpose of making informed business decisions.

Idemitsu in a number of previous submissions to the ACCC regarding HVAU matters (i.e. Final Indicative Service, Annual Compliance Assessments etc.) has requested more transparency in regards to pricing methodologies and Loss Capitalisation to promote better understanding for the benefit of all stakeholders. Idemitsu note a more detailed explanation has been provided in the Position Paper on the Final Indicative Service (issued 1 August 2014).

Based upon Idemitsu's understanding of existing HVAU principles (including the revenue allocation approach), it has proceeded to commit to large investment decisions regarding rail and mine infrastructure development in the Gunnedah Basin.

### **4. Please identify and explain any other matters relevant to this revenue allocations review.**

Please refer to the preceding submission and the Report contained in Attachment 1 for all matters relevant to this review.

**strategy&**

Formerly Booz & Company

**SUBMISSION REPORT**

# Access Revenue Allocation



**Sydney**

**August 2014**

**Version 2.0**



---

*PwC Strategy& (Australia) Pty Ltd., Level 7, 7 Macquarie Place, Sydney NSW 2000, Australia  
T: +61 2 9321 1900, F: +61 2 9321 1990, [www.strategyand.pwc.com/anzsea](http://www.strategyand.pwc.com/anzsea)*

ABN 11 130 171 658

## Table of Contents

<b>1.</b>	<b>Introduction</b> .....	<b>1</b>
1.1.	Background .....	1
1.2.	Terms of Reference.....	1
1.3.	Structure of the report.....	2
<b>2.</b>	<b>ARTC pricing practices</b> .....	<b>3</b>
2.1.	Introduction.....	3
2.2.	Network development potential of the Gunnedah Basin coal region .....	3
2.3.	Pricing principles set out in the HVAU .....	4
2.4.	ARTC pricing approach .....	6
2.5.	Economically efficient prices for below rail access.....	9
2.6.	Precedent in other jurisdictions.....	12
2.7.	Investment to improve system capacity .....	16
<b>3.</b>	<b>Review of the current revenue allocation approach</b> .....	<b>17</b>
3.1.	Benefits of the current approach.....	17
3.2.	Potential improvements .....	18

## List of Figures

Figure 1 – Contracted and Prospective Volumes, Werris Creek – Muswellbrook (Gunnedah line) (million tonnes per annum) .....	3
Figure 2 – Coal Mine Haul Lengths .....	4
Figure 3 – Movement in the Regulatory Base With and Without Loss Capitalisation .....	8
Figure 4 – Rail Infrastructure Cost Characteristics .....	9
Figure 5 – QR Reference Tariffs Approved by QCA (2000 Draft Access Undertaking) .....	13
Figure 6 – Illustrative Below Rail Cost per Net Tonne by Indicative Haul Length, Blackwater System.....	14

## List of Tables

Table 1 – Access Charges in the Hunter Valley Network, 2014 (\$/kgtkm) .....	6
Table 2 – Example tariffs for a reference service in each pricing zone .....	7

## **1. Introduction**

1. Idemitsu Resources Australia Pty Ltd (Idemitsu) and Whitehaven Coal Ltd (Whitehaven) have jointly retained PwC Strategy& (Australia) Pty Ltd ("Strategy&") to provide access revenue advice regarding the Australian Competition and Consumer Commission's (ACCC) recent "Revenue Allocation Review" Discussion Paper related to the Hunter Valley Rail Network Access Undertaking (HVAU).

### **1.1. Background**

2. Idemitsu and Whitehaven are the two major coal producers in the Gunnedah Basin in NSW with both current and prospective coal mining operations. Coal from the Gunnedah Basin mines is shipped by rail for export through the Port of Newcastle. Although mines located in the Gunnedah Basin face a comparatively long haul distance compared to other mines in the Hunter Valley, export volumes from the Basin are forecast to grow significantly over time. Volumes from existing mines located at Turrawan, Boggabri, Gunnedah and Werris Creek will be expanded by new mines currently in varying stages of development at Maules Creek, Vickery South, Watermark and Caroonah.
3. Recently the cost challenges facing Australia's mining industry have become more acute. The industry in Australia faces growing pressure to compete with lower cost producers internationally and the easing of the mining boom (and lower global prices) restores a focus on cost and efficiency, in place of recent focus on capacity and expansion. Users of the Hunter Valley network are facing a number of challenges in both sustaining the on-going viability of mining operations and being able to economically underwrite potential expansions. Producers in the Gunnedah Basin face the additional challenge of below rail costs which are higher than those faced by other users of the Hunter Valley network, and higher above rail costs which arise from characteristics of the below rail infrastructure.
4. The Hunter Valley rail network is currently managed by the Australian Rail Track Corporation (ARTC) with access regulated through the HVAU administered by the ACCC.

### **1.2. Terms of Reference**

5. Idemitsu/Whitehaven have defined a Terms of Reference for Strategy&'s consideration of the issues identified in the ACCC's Discussion Paper. The Terms of Reference are set out below:
  - (i) Research and provide commentary on ARTC's access pricing practices in the Hunter Valley having regard to:
    - a. Network development potential of the Gunnedah Basin coal region;
    - b. Pricing principles set out in the Hunter Valley Access Undertaking;
    - c. Current ARTC pricing practices
    - d. Economically efficient pricing practices for below rail access;
    - e. Regulatory precedent in the Hunter Valley and in other jurisdictions;

- f. Investment to improve system capacity;
- g. Issues raised by the ACCC;
- h. Address any issues raised by other stakeholders in respect of the ACCC review.

(ii) Where appropriate, recommend improvements to the current pricing approach.

**1.3. Structure of the report**

6. This report presents our findings and is structured into two further sections to follow the Terms of Reference:
- A discussion of the ARTC's pricing practices and relevant context; and
  - A review of the current revenue allocation approach and suggested improvements.

## 2. ARTC pricing practices

### 2.1. Introduction

7. This section provides a review of ARTC pricing practices having regard to the factors set out in the Terms of Reference. The structure of the section addresses each of the factors:

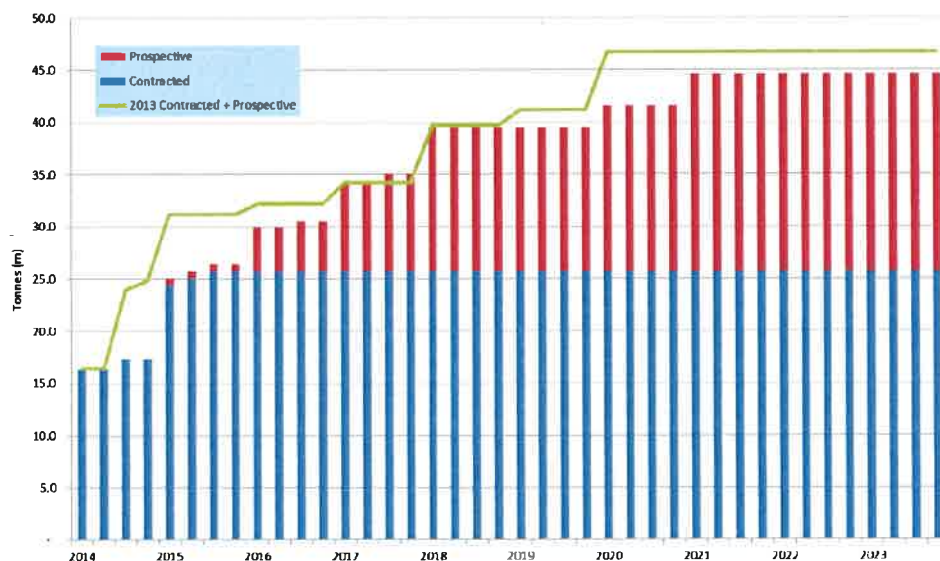
- Network development potential of the Gunnedah Basin coal region;
- Pricing principles set out in the Hunter Valley Access Undertaking;
- Current ARTC pricing practices
- Economically efficient prices for below rail access;
- Regulatory precedent in the Hunter Valley and in other jurisdictions; and
- Investment to improve system capacity.

### 2.2. Network development potential of the Gunnedah Basin coal region

8. The Gunnedah Basin is a developing coal region with good growth prospects. Export volumes from the Gunnedah basin have potential (subject to viability of a number of prospective projects) to increase significantly from in excess of 15 mtpa in 2014 to in excess of 40 mtpa in 2020 – a compound annual growth rate of over 25%.

9. ARTC has provided a summary of contracted and prospective growth in the Gunnedah basin as summarised in Figure 1 below. Contracted volumes are those that are subject to a binding contract compared to prospective volumes that are associated with projects that are moving forward but not yet at a stage where producers wish to commit to a contract.<sup>1</sup>

**Figure 1 – Contracted and Prospective Volumes, Werris Creek – Muswellbrook (Gunnedah line)  
(million tonnes per annum)**



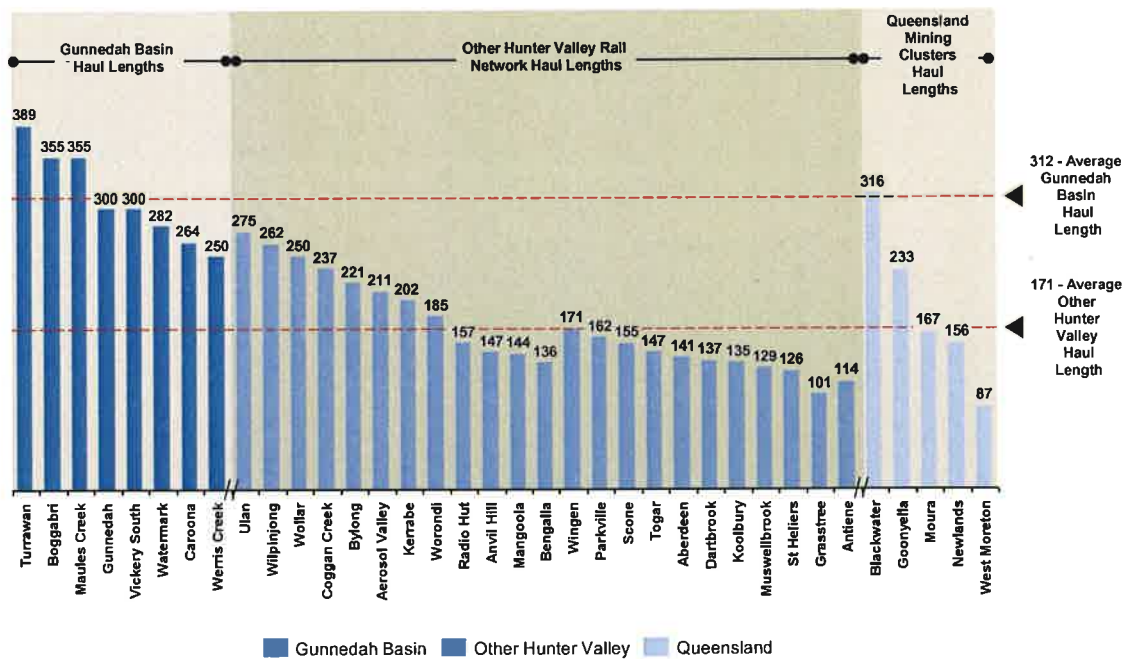
<sup>1</sup> See 2014-2023 Hunter Valley Corridor Capacity Strategy – Consultation Draft, June 2014, p12.



Source: 2014-2023 Hunter Valley Corridor Capacity Strategy – Consultation Draft, June 2014.

10. There will be a range of factors that will influence the competitiveness and growth of mines in the Gunnedah Basin, consideration of which are beyond the scope of this analysis. However in respect of rail transport, the Gunnedah Basin mines are disadvantaged by longer haul lengths compared to other mines in the Hunter Valley and in other Australian coal mining regions. This impacts both above rail costs and below rail costs, particularly in the absence of a 'distance taper' which is a feature of below rail pricing in other regimes (see Section 2.6). A comparison of haul lengths is provided in Figure 2 below.

Figure 2 – Coal Mine Haul Lengths



Note: Estimated haul length based on approximate network point of coal train origin / destination less allowance for network distance at port of ~160km.

Source: 2014-2023 Hunter Valley Corridor Capacity Strategy – Consultation Draft, June 2014. Queensland Rail's Submission to the Productivity Commission's Black Coal Industry Inquiry (1999).

11. Gunnedah Basin mines are also disadvantaged by:

- Higher charges per gross tonne kilometre in Zone 3 than in Zone 1;
- Higher charges within Zone 1 due to inability to use the Zone 1 indicative service; and
- Higher above rail costs due to payload limitations, and the need for 'banking', both of which arise from characteristics of the Zone 3 network.

### 2.3. Pricing principles set out in the HVAU

12. Access pricing principles are set out in Section 4 of the HVAU in relation to a wide range of factors. This consideration has been focused on those sections of most relevant to the revenue allocation review. Sections 4.2 and 4.3 of the HVAU require

ARTC to set charges for below rail access to its Hunter Valley network such that revenue falls between two standard regulatory limits, i.e. revenue:

- Must at least meet the direct costs imposed by the user or access holder (the floor test); and
  - Must not exceed the full economic costs of providing the service (the ceiling test).
13. The revenue limits work to ensure that all users pay at least the direct costs they impose on the system (i.e. prices are free of cross-subsidy) and are no higher than the full economic cost of the relevant services, including a reasonable risk-adjusted return on capital (i.e. prices are free of monopoly rents). The ceiling test applies to each user and to combinations of users (the so called combinatorial ceiling test).
  14. ARTC segments the Hunter Valley below rail network for pricing and revenue purposes into three pricing zones (PZ), comprising: PZ1 (Newcastle Port to Muswellbrook), PZ2 (Ulan line) and PZ3 (Gunnedah line). The shared network in PZ1 is utilised by both PZ2 and PZ3 users.
  15. At present, the ceiling test is a binding constraint on access revenues from PZ1 and PZ2 (the constrained network) whereas revenues from PZ3, at present volumes, are insufficient to meet the ceiling test (the unconstrained network).
  16. Sections 4.4 to 4.12 of the HVAU set out the mechanisms and approaches to a number of factors including the specification of the regulatory asset base, definition of economic cost, cost allocation approach, depreciation calculation, rate of return, unders and overs accounting, compliance assessment and the structure of charges.
  17. Section 4.13 of the HVAU sets out the pricing objectives having regard to variable, fixed and capital cost components. In summary, the objectives require:
    - Full recovery of variable costs to reflect actual network usage;
    - Maximum recovery of fixed and capital costs;
    - Application of a take or pay component to fully recover capital costs over the economic life of new investments and some or all fixed costs;
    - The proportion of fixed costs recovered to be applied consistently within a pricing zone; and
    - An open and equitable mechanism for the application of take or pay charges.
  18. Section 4.15 sets out the principles on which the HVAU permits charge differentiation regarding optimising use of the network and optimising Coal Chain Capacity. However section 4.16 also limits the extent to which differentiation will apply, precluding differentiation on the basis of the identity of the applicant or whether it is a Government authority and if the characteristics of the access rights being sought are alike, they operate within the same end-market and on the basis of the marginal cost of production of the mines.
  19. Sections 4.17 to 4.20 set out the approach to determining initial and final indicative train service specifications and related access charges.

## 2.4. ARTC pricing approach

### Current pricing practice

20. The current approach to pricing by ARTC in the Hunter Valley is complex and much of the analysis in support of it is confidential. Available information suggests price setting involves a three step process:

- (i) Charges are levied for each pricing zone comprising a variable component to cover a user's direct costs and a fixed charge to cover common costs. For the shared network charges are intended to cover both variable and fixed costs attributed to PZ1, PZ2 and PZ3 users through their combined use of PZ1. The charges are set out in Table 1 below.

**Table 1 – Access Charges in the Hunter Valley Network, 2014 (\$/kgtkm)**

Type of Charge	Pricing Zone 1	Pricing Zone 2	Pricing Zone 3
Variable (\$/kgtkm)	0.909	2.632	1.496
Fixed (\$/kgtkm)	9.893	8.298	9.635
Service Characteristics <sup>2</sup>	<ul style="list-style-type: none"> <li>▪ 30 tonne axle load</li> <li>▪ 60 km/h (loaded)</li> <li>▪ 80 km/h (empty)</li> <li>▪ 96 wagons</li> <li>▪ 1,543 metres</li> </ul>	<ul style="list-style-type: none"> <li>▪ 30 tonne axle load</li> <li>▪ 60 km/h (loaded)</li> <li>▪ 80 km/h (empty)</li> <li>▪ 96 wagons</li> <li>▪ 1,543 metres</li> </ul>	<ul style="list-style-type: none"> <li>▪ 25 tonne axle load</li> <li>▪ 80 km/h (loaded)</li> <li>▪ 80 km/h (empty)</li> <li>▪ 82 wagons</li> <li>▪ 1,350 metres</li> </ul>

Source: ARTC <<http://www.artc.com.au/Content.aspx?p=229>>

- (ii) A resettlement process is undertaken which reallocates revenue between segments. This lowers the contribution to the shared network by PZ3 users and limits the extent of under-recovery in PZ3, while ensuring all users pay at least their direct costs for each haul.
- (iii) Revenue is then reconciled to determine the shortfall or surplus in each pricing zone. Prices charged to access seekers are adjusted to offset the shortfall or surplus.

### Gunnedah Basin producers pay more per tonne and per tonne kilometre

21. Under the current pricing arrangements, Gunnedah Basin mines pay more on a dollars per tonne and dollars per tonne kilometre basis than PZ1 and PZ2 mines. As an example, using a reference haul length and train configuration for each pricing zone and published ARTC tariffs<sup>3</sup>, costs per net tonne and per net tonne kilometre are presented in Table 2 below.

22. Costs per net tonne (from Table 2) are:

<sup>2</sup> Based on the Initial Indicative Service

<sup>3</sup> Standard tariffs from the HVAU were converted to a cost per gross tonne for the reference haul lengths. An assessment was made of the gross/tare weight of a reference train configuration to determine the proportion of the round-trip cost paid which is attributable to the payload (i.e. the coal). The gross/tare proportion for a round trip was developed by considering a fully-loaded train in the Initial Indicative Service Configuration travelling from load point to Port and returning empty. The gross and tare weights of the locomotive and wagons were determined based on data published in the ACCC Position Paper: ARTC's Hunter Valley Coal Network Access Undertaking Final Indicative Services Variation.

- (i) 32% lower for PZ2 producers than PZ3 producers; and
- (ii) 74% lower for PZ1 producers than PZ3 producers.

23. PZ3 users also pay a higher price per net tonne kilometre, albeit the difference between the pricing zones in this instance is less pronounced. Costs per net tonne kilometre are:

- (i) 4% lower for PZ1 producers than PZ3 producers; and
- (ii) 2% lower for PZ2 producers than PZ3 producers.

**Table 2 – Example tariffs for a reference service in each pricing zone**

Pricing Zone	Reference Load Point	Reference Haul Length	HVAU Tariff	Calculated Cost per Net Tonne	Calculated Cost per Net Tonne Kilometre
		km	\$/’000 GTK	\$/NT	c/NTK
1	Ravensworth	101	10.802	1.56	1.55
2	Mangoola	261	10.930	4.08	1.57
3	Narrabri	372	11.131	5.97	1.60

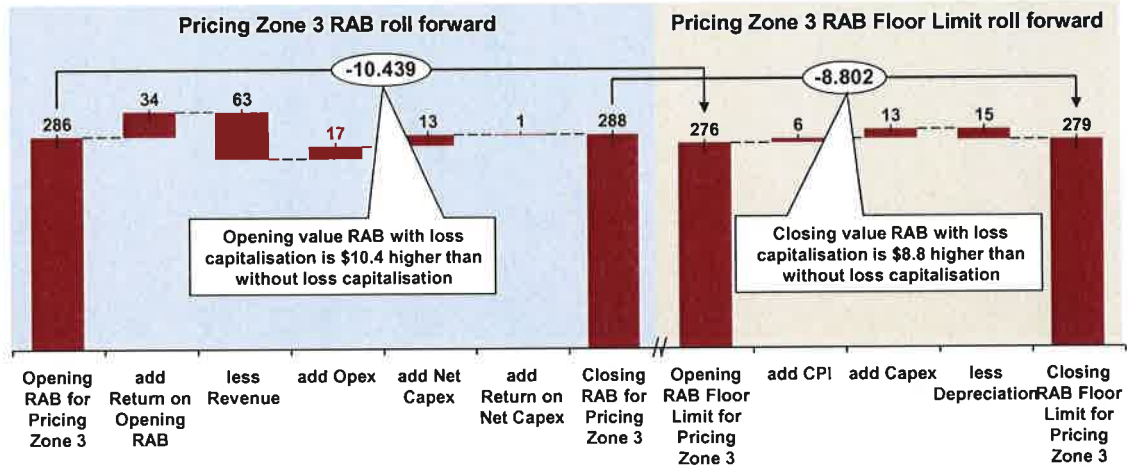
Source: Strategy& analysis of ARTC data.

#### *Loss Capitalisation*

24. A financial framework known as *Loss Capitalisation* is applied in PZ3 instead of the unders and overs arrangement used in PZ1 and PZ2. Loss Capitalisation allows ARTC to capitalise any annual revenue shortfall in PZ3 into the regulatory asset base for possible recovery in future years. This provides ARTC with an opportunity to recover, over time, the full economic costs of its Hunter Valley network. Whether ARTC will actually recover all capitalised losses depends on a range of factors. It is understood ARTC’s willingness to capitalise losses has been based on an expectation of growing demand within PZ3, an expectation which is being realised under current pricing arrangements.

25. Two RABs are maintained, one with loss capitalisation (the RAB) and the other without (the RAB Floor Limit). In 2013 ~\$1.6 million of capitalised losses were recovered, reducing total loss capitalisation from \$10.4m to \$8.8m. The movement in each of the regulatory asset bases, with and without loss capitalisation, is illustrated in Figure 3 below.

**Figure 3 – Movement in the Regulatory Base With and Without Loss Capitalisation**



Note: Example is shown for 2013.

Source: ACCC, Consultation Paper, Australian Rail Track Corporation's compliance with the financial model and pricing principles in the Hunter Valley Coal Network Access Undertaking for 2013.

#### Historical pricing practice

26. ARTC's submission to this review demonstrates that the treatment of constrained and unconstrained mines in the Hunter Valley is a longstanding feature of rail access regulation under both the NSWRAU and the HVAU. Aspects of the ARTC's pricing practices reflect long standing practice in the Hunter Valley dating back to the 1999 IPART approved access undertaking. Importantly, pricing practices were not automatically imported from the IPART undertaking to the HVAU, as is demonstrated by the discontinuation of the 'cusp' approach. In contrast, the revenue allocation process applied to constrained and unconstrained mines under the HVAU, an undertaking developed through extensive consultation, was consistent with the approach applied under the IPART undertaking, with changes only made to improve transparency or promote efficiency.<sup>4</sup>
27. The approach has also been used to support the development of mines on the Ulan line. Prior to 2007-08 mines in PZ2 made no contribution to PZ1 fixed costs, i.e. they paid only their direct costs. From 2007-08 to 2013 as mine viability and export volumes increased PZ2 producers began to contribute to the PZ1 fixed network costs with the contribution increasing over time.
28. The current treatment of PZ3 producers in this revenue allocation review is the same as occurred for PZ2 producers prior to 2007-08. As ARTC note: "some of the mines that are in the Constrained Group of Mines were formerly unconstrained mines and mines that are currently unconstrained can be expected to become constrained in future, assuming the Hunter Valley coal network continues to grow and develop."<sup>5</sup>

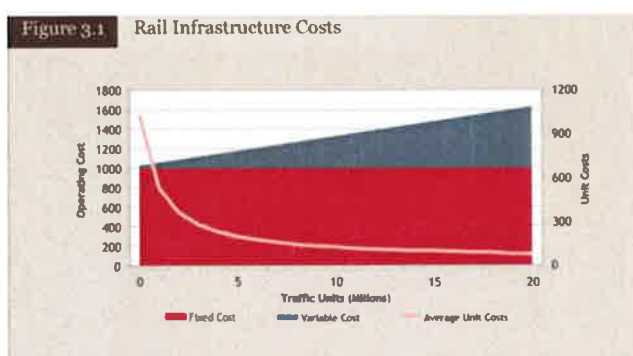
<sup>4</sup> ARTC, Revenue Allocation Review ARTC Submission to ACCC Discussion Paper, August 2014.

<sup>5</sup> ARTC, Revenue Allocation Review ARTC Submission to ACCC Discussion Paper, August 2014.

## 2.5. Economically efficient prices for below rail access

29. Any amendment or variation to the current access arrangements should be assessed having regard to whether they are efficient. Efficiency is a significant component of the Objects of the Competition and Consumer Act (Part IIIA) which is to “promote economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream market”. Similar objectives regarding increasing competition and ensuring efficient use of resources are reflected in Section 1.2 of the Hunter Valley Access Undertaking.
30. Achieving and maintaining economic efficiency is consistent with a range of benefits to stakeholders; railway owners receive competitive returns, producers pay prices that reflect an efficient competitive market and incentives are provided for on-going investment in railway assets and capacity.
31. Maximising volume and throughput in the Hunter Valley Coal Chain will also allow the mining industry (and the broader economy) to capture the economic surplus associated with expanding coal production and export. These impacts are likely to include increased turnover, economic value add, additional income and jobs to the Hunter Valley region.
32. There are two characteristics of below rail infrastructure that impact the economic efficiency associated with that infrastructure: the high proportion of fixed costs and the downward sloping average cost curve, as illustrated in Figure 4 below.

**Figure 4 – Rail Infrastructure Cost Characteristics**



### Comment

- Rail networks and below rail services typically have a high proportion of fixed costs and only a small proportion of costs (circa 20%) will vary directly with usage. As a consequence the contribution each user makes, or group of users make, to fixed or common costs is a material issue that can significantly influence the economic performance of the network.
- Railways exhibit economies of density, in that the long-run average cost curve slopes downwards (as volumes increase, unit costs decline). Maximising volumes on the network will improve economic efficiency (at least in the absence of congestion).

Source: Strategy& analysis, PPIAF, *Railway Reform: Toolkit for Improving Rail Sector Performance* p34.

33. Considering the high proportion of fixed costs for below rail services, as volumes increase the total cost per unit of throughput will decline to the benefit of all users of the network.<sup>6</sup> As a consequence, economic efficiency will generally be enhanced where total volumes on the network are maximised.

<sup>6</sup> The principle that higher volumes and network utilisation are better than lower volumes is true up to the point at which capacity is outstripped by demand at the prevailing price. Following investment in capacity the rule that higher volumes are better will again apply. See for example PPIAF, *Railway Reform: Toolkit for Improving Rail Sector Performance* p34.

34. Generally prices should be set to recover the full economic cost of providing the relevant infrastructure and in a way that maximises utilisation of the network. In order to avoid any cross-subsidies, each user should pay at least the incremental cost of their use of the network. However how other joint and common costs are recovered from users is a matter of contention and a central consideration in the revenue allocation discussion.
35. In principle, joint and common costs should be recovered from users in a way which minimises any distortion in consumption decisions, thereby maximising volumes and utilisation of the infrastructure. Price discrimination having regard to users' capacity to pay access charges may therefore aid economic efficiency. Indeed regulators would typically support discriminatory pricing between users to the extent it encouraged efficient use of the rail network.
36. In the context of the Hunter Valley coal network, there is significant flexibility to set individual prices within the regulatory floor and ceiling limits. In that respect ARTC clearly differentiates between coal and non-coal users of its Hunter Valley network (setting lower prices for the latter) but has limited its differentiation between coal users other than in recognition of capacity to pay.
37. ARTC state that the essence of the pricing approach used is price differentiation between constrained and unconstrained pricing zones and that it is consistent with economic efficiency and the Objects of the CCA as it is driven by variation in capacity to pay. ARTC also state that users in the constrained zones make a higher contribution to common costs in the constrained zones than users in the unconstrained zones. However over time, as volumes in an unconstrained pricing zone grow, the contribution to common costs made by those users will increase.<sup>7</sup> PZ3 pricing already includes a proportion of ARTC overhead allocation which benefits constrained users.
38. Once revenue for all network segments including PZ3 is at the ceiling, arguments in favour of industry development fall away and the rationale for differentiated application of common costs weakens. That said, there may be a case for maintaining over time some sort of distance taper<sup>8</sup> in access charges to assist in offsetting longer haul lengths, where doing so would enhance economic efficiency.
39. In addition to differential pricing aimed at maximising volume and use of the infrastructure, the structure of access charges should also encourage efficient use of available infrastructure aimed at maximising utilisation of existing infrastructure and efficient investment.
40. When it assessed ARTC's proposed rail access undertaking, the ACCC listed a number of principles it considers important in establishing an economically efficient regime, which included<sup>9</sup>:

---

<sup>7</sup> ARTC, *Revenue Allocation Review ARTC Submission to ACCC Discussion Paper, August 2014, p10.*

<sup>8</sup> A distance taper is where the average cost per gross tonne kilometre declines as haul length increases. The distance taper in effect compensates for the distance disadvantage of longer haul mines.

<sup>9</sup> *Productivity Commission, Inquiry Report: Road and Rail Freight Infrastructure Pricing, December 2006, pE.3.*

- Access prices should provide the ARTC with incentives to provide services at efficient levels of cost and quality and to undertake efficient investment.
  - Access prices should provide incentives for efficient use of rail track infrastructure.
41. Arguably PZ3 user charges in PZ1 should increase as capacity becomes constrained in order to ration capacity and encourage efficient use and efficient investment. However even if PZ3 users continue to make a lower contribution to common costs in PZ1 as capacity becomes scarce, proper application of the ceiling test should prevent PZ1 and PZ2 users paying more than the full economic cost of the infrastructure required to meet their needs on a stand-alone basis (without PZ3 volumes).
42. Nevertheless, the structure of access charges should provide effective price signals to users regarding the efficient use of the rail network and encouraging efficient train configurations will be relevant to the efficient use of existing infrastructure and encouraging efficient investment.

#### *Final Indicative Service*

43. A process has been underway to establish an efficient reference train configuration for the Hunter Valley coal network (the Indicative Service). The Indicative Service is the reference train configuration in respect of train length, train speed and axle load, that best optimises the efficient utilisation of the rail network and coal chain capacity.
44. Configurations which differ from the Indicative Service will attract different charges, reflecting the impact use of a non-indicative service has on coal chain capacity. After various interim assessments, a Final Indicative Service based on advanced HVCCC modelling has been developed and is currently being considered by the ACCC and stakeholders.
45. Relevant to this discussion, it is proposed that the allocation of joint and common costs in PZ1 is structured to reflect relative consumption of capacity of different train configurations. Users from PZ3 that operate trains smaller than the Indicative Service will be allocated a relatively higher share of joint and common costs (per gross tonne kilometre) to reflect the opportunity cost of their relatively inefficient use of capacity. The effectiveness of this price signal is not diminished by the reallocation of revenue to Zone 3, because decisions regarding investment in rolling-stock are necessarily long term, and will have implications well beyond the period for which this reallocation is expected to apply.
46. Providing a price signal through the Indicative Service is not incompatible with the previous discussion of structuring differential charges to maximise export volumes and use of the network. Price signalling is useful in encouraging efficient use of existing infrastructure but only effective if users can change behaviour in response to those price signals. An overarching consideration however is how much each user is charged to transport their coal from mine to port and capacity to pay issues remain relevant to maximising volume and throughput in the coal chain Hunter Valley.



#### *Other Efficiency Considerations*

47. Contrary to assertions by other submissions to the ACCC review, there appears no evidence that ARTC's pricing is cross subsidising between regions. Differential pricing, even within the same end market of export coal haulage, does not constitute cross subsidisation provided each user meets the incremental costs they impose on the shared networks. Indeed, Gunnedah Basin mines pay more on a dollars per tonne and dollars per tonne kilometre basis than PZ1 and PZ2 mines.
48. It has also been suggested that the revenue ceiling test should be applied to each pricing zone rather than on a mine to port basis. ARTC applies the ceiling test such that access revenue, over the traffic's journey, must be no more than the economic cost of all segments required for the journey on a standalone basis. In addition, the test applied by ARTC is combinatorial, which means that the test must hold true for each combination of network traffics on a stand-alone basis. However regulatory practice under a constrained market pricing approach supports calculating the standalone cost of the mine to port service, rather than calculating the standalone cost of a number of network segments separately.<sup>10</sup>

#### **2.6. Precedent in other jurisdictions**

49. General regulatory practice supports the use of differential pricing to meet economic efficiency objectives as evidenced by commentary from the Productivity Commission. There is also evidence of its application in the bulk rail freight haulage sector to support developing growth areas and to reduce the distance disadvantage of haul length.

#### *Productivity Commission*

50. The Productivity Commission has opined that infrastructure users should pay for the total costs of providing efficient infrastructure, with those charges structured to minimise distortion of consumption choices.<sup>11</sup> In Finding 3.4 of the Inquiry Report No. 41 the Productivity Commission makes this observation:

*Prices set to recover each mode's total costs, reflecting Ramsey pricing principles to the extent possible, have the potential to promote efficient use of road and rail freight infrastructure, as well as meeting a self-financing requirement.*

*More specifically, while users should be required to cover at least the attributable costs of their infrastructure use, their contribution to (unattributable) fixed or common costs should be inversely related to the price responsiveness of their demand for the services provided, so as to minimise efficiency losses from discouraged consumption.*

51. The Productivity Commission's comment reflects a relatively pure theoretical approach that relies on Ramsey pricing principles. These principles are an extension of the more general approach taken in economic regulation that supports setting prices according to a user's capacity to pay. The Commission notes that practical application is likely to be impeded by the information requirements and could, in some instances, lead to inequitable outcomes. This is particularly because users with lower

<sup>10</sup> See for example Baumol and Willig, *Competitive Rail Regulation Rules Should Price Ceilings Constrain Final Products or Inputs?*, *Journal of Transport Economics and Policy*, Volume 33, Part 1, pp43-54.

<sup>11</sup> *Productivity Commission, Road and Rail Freight Infrastructure Pricing – PC Inquiry Report No.41, 22 December 2006. p.492*

price sensitivity (and often fewer alternatives) would be required to pay proportionately more.

52. Nevertheless the economic efficiency implications are an important consideration in the context of the Hunter Valley Coal Chain; ensuring access seekers meet their own direct costs, while common costs are allocated according to capacity to pay is an economically efficient approach to cover total infrastructure costs.

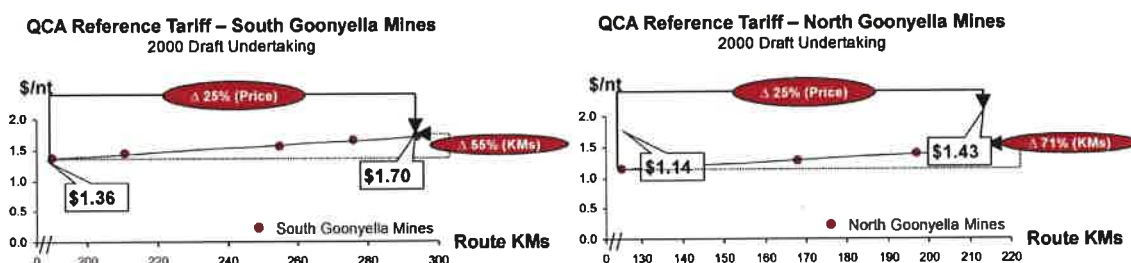
### Queensland

53. Historically the Queensland Competition Authority (QCA) has recognised that there may be an advantage to allocating common or unassignable costs to mines closer to the coast relative to mines further from the coast, subject to each user covering the costs of their incremental use of the system. The QCA has identified the advantages to the State of increasing the attractiveness of mines with longer haul lengths, as their development and output will enhance the overall productivity of the Queensland mining industry.<sup>12</sup>

*There may be an advantage to the State as a whole if a relatively higher proportion of charges that cannot be assigned on any cost causation basis to any user is attributed to mines closer to the coast relative to mines further from the coast. However, this approach would be subject to every user and every cluster of users covering the costs associated with its or their (as the case may be) incremental use of the system, including the costs of the infrastructure used exclusively by that user or cluster. The advantage to the State arises from the prospect of such an approach increasing the attractiveness of mines remote from the coast, enhancing their prospects for development and increasing the output of the Queensland mining industry.*

54. In all generations of Queensland Rail and Aurizon Network access undertakings, as kilometres travelled increases, price increases at a decreasing rate – a pricing approach consistent with a distance taper.<sup>13</sup> In the 2000 Draft Access Undertaking there was a clear intention from Queensland Rail to apply a distance taper, as shown in Figure 5 – below.

**Figure 5 – QR Reference Tariffs Approved by QCA (2000 Draft Access Undertaking)**



Source: Strategy& analysis, QCA – Draft Decision on QR's Draft Undertaking Vol. 3, Dec. 2000.

55. Figure 5 – depicts the relationship between the early 2000's reference tariff and haulage lengths from mine to port. It shows that the increase in lengths was not

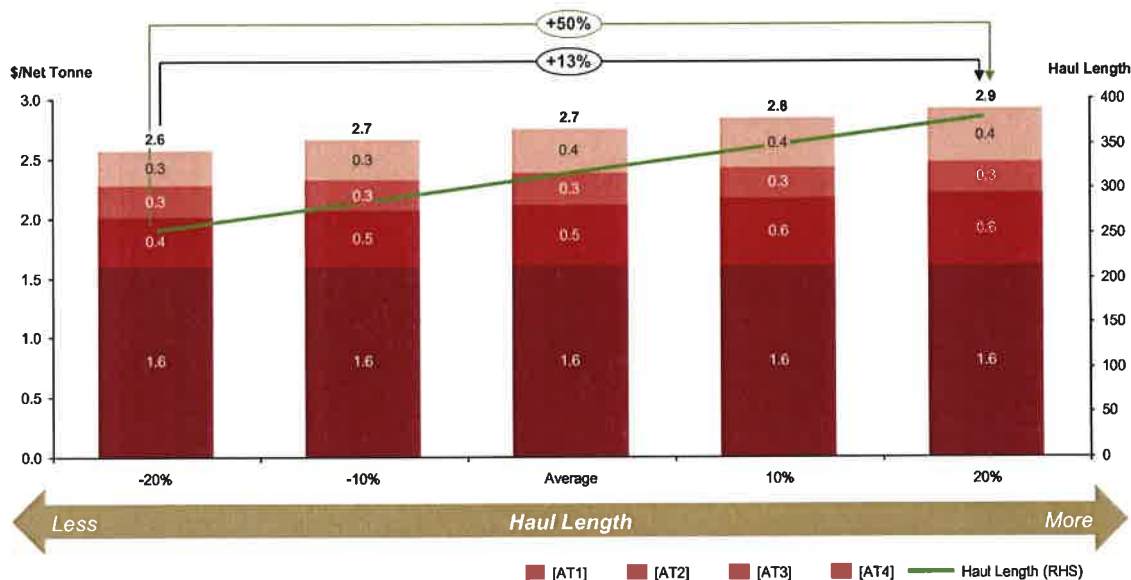
<sup>12</sup> Queensland Competition Authority, Issues Paper, Queensland Rail's Draft Access Undertaking – Reference Tariffs, Reference Train Services and Rate Regulation, October 1999, p21.

<sup>13</sup> Queensland Competition Authority, Draft Decision on QR's Draft Undertaking, Volume 3 – Reference Tariffs, December 2000.

matched by a commensurate increase in price per net tonne (i.e. a distance taper applied). For the South Goonyella cluster, a 55% increase in haulage lengths resulted in only a 25% increase in cost per net tonne. Similarly in North Goonyella, a 71% increase in haulage lengths resulted in a 25% increase in cost per net tonne.

56. Current pricing within the Central Queensland Coal Network (and proposed pricing under "UT4") includes multi-part below rail access tariffs, a number of components of which do not vary with distance. This delivers a distance taper in the rate. As an example, in the Blackwater Cluster when haul lengths increase by 50% the cost per net tonne increases by only 13% as illustrated in Figure 7. A similar effect is seen in other mine clusters, as all clusters operate under the same pricing principles. The key elements driving the distance taper in this instance are the two pricing components (AT2, which is 'per path' and AT4, which is 'per tonne') that do not increase with distance. Aurizon Network, under its draft 2014 undertaking, has proposed to shift a larger proportion of its revenue recovery into AT2, a change which will strengthen the distance taper to the benefit of more distant mines, relative to shorter haul mines.

**Figure 6 – Illustrative Below Rail Cost per Net Tonne by Indicative Haul Length, Blackwater System**



Source: Strategy& analysis, Aurizon, ARTC, QR Network's Access Undertaking.

57. Distance tapers are a common feature of rail regulation and are consistent with cost reflective rail pricing, i.e. there is a natural distance taper to costs in a below rail system. However PZ3 users currently pay more per net tonne kilometre than those in PZ1 and PZ2. ARTC note that "The unit cost of access for Gunnedah Basin mines is currently around 20% higher on a cents per net tonne kilometre basis."<sup>14</sup>

<sup>14</sup> ARTC, Revenue Allocation Review ARTC Submission to ACCC Discussion Paper, August 2014, p15.

### *Rolleston Pricing Example*

58. Coal is transported from the Rolleston mine to the Port of Gladstone. The total haul length is approximately 424km including a 109km connection to the Blackwater Rail System. An analogy could be drawn between rail access pricing for Rolleston and PZ3 producers as both use a section of dedicated infrastructure before joining a more highly utilised shared network. In the QCA's 2011-12 Annual Review of Reference Tariffs it was explained that: "a number of loading points would not meet their spur costs plus the minimum contribution to the system's common costs on the basis of the system reference tariff. These loading points have their own reference tariff (i.e. Minerva, Rolleston and Vermont) based on their incremental costs plus the minimum contribution to the common costs of the remainder of the network."<sup>15</sup>

### *Western Australia*

59. Section 47(1) of the West Australian Rail (Access) Code, 2000 requires each railway owner to submit to the regulator for approval a statement of rules that are to apply where breaches of the ceiling price test occur, the so called Over Payment Rules. The Pilbara Infrastructure's (TPI) rules, which were approved by the regulator, state, inter-alia<sup>16</sup>:

- As Total Costs are allocated on a Route Section basis, it is necessary to distribute Access Revenue earned over a particular route to individual Route Sections.
- This will be done in accordance with the following rules:
  - Access Revenue derived from a Route can only be allocated to the Route Sections on that Route. However this does not mean that Access Revenue must be allocated to the route sections from which it was derived.

TPI will allocate Access Revenue to cover the costs attributed to the applicable Route Section in the following order:

- Incremental Costs against all applicable Route Sections;
- Up to the Ceiling on all applicable branch or feeder (dedicated) Route Sections; and
- Up to the Ceiling on all applicable shared Route Sections.

60. TPI states the justification for the ordering of the allocation process is based on economic principles. First to avoid cross subsidisation between route sections, revenue allocated to each line section must at least cover the incremental cost. Second, recovery of capital costs on branch or feeder lines ranks ahead of shared lines on the basis that there is no other traffic on these lines to fund the dedicated infrastructure and unless the costs are covered the lines may close. It is also noted that where TPI and the Operators have reached agreement to a different Access

---

<sup>15</sup> QCA, *QR Network 2011-12 Volume Reset and Annual Variation of Reference Tariffs Summary of QR Network's Application and the Authority's Assessment*, p8.

<sup>16</sup> *Virtually the same rules and associated rationale is in place for Over Payment Rules for The Pilbara Infrastructure as identified in The Pilbara Infrastructure Railways (Access) Code 2000 Overpayment Rules, March 2013 and other entities such as the PTA of WA, Over Payment Rules, 1 Jan 2004.*

Revenue allocation arrangement in an Access Agreement that arrangement would prevail.

61. This revenue allocation approach is also reflected in the approach taken by the Economic Regulation Authority Western Australia that revenue should be allocated according to a rank order that:

- Allocates to each access seeker the direct cost for their use of a sector;
- Allocates to an access seeker using a dedicated sector the common costs for that sector; and
- Divides between the access seekers using a shared sector the common costs for that sector.

## **2.7. Investment to improve system capacity**

62. Gunnedah Basin mines are underwriting investment to improve system capacity for the benefit of all users. Recently Idemitsu/Whitehaven agreed that \$150 million<sup>17</sup> of costs should be included in the RAB to cover the cost of investment to increase the Gunnedah line to 30 tonne axle loads. As a result capacity benefits will propagate throughout the network through increased volume per path, including on the shared network. Whitehaven estimates that the 30 tonne axle load project has provided significant capacity improvement through the congested section of the network between Hexham and the port.

---

<sup>17</sup> *Whitehaven email correspondence.*

### 3. Review of the current revenue allocation approach

63. The discussion above raises a number of contextual issues relevant to the ARTC's current revenue allocation approach:

- There is potential for significant growth in the Gunnedah Basin – a compound annual growth rate of over 25% in the next 6 years is possible, subject to project economics and export volume demand;
- The new mines are at a significant distance disadvantage compared to existing mines (an average haul length of 312 kms compared to an average of 171 kms elsewhere across the Hunter Valley);
- At present the regulatory ceiling test is a constraint on revenues in the PZ1 and PZ2 pricing zones but not in PZ3 at present volumes; and
- Gunnedah Basin producers pay more per tonne and per tonne kilometre than other producers in PZ1 and PZ2. In contrast to the normal distance taper approach, the average price per tonne kilometre of PZ3 mines actually increases with distance.<sup>18</sup>

#### 3.1. Benefits of the current approach

64. Having regard to the contextual issues, the current revenue allocation approach delivers a number of economically beneficial outcomes:

- Supporting developing coal regions is consistent with economic efficiency, public interest and historical precedent;
- Encouraging growth reduces asset stranding risk; and
- Efficient investment is being encouraged.

65. These outcomes also demonstrate alignment with the objects of the Competition and Consumer Act (s44AA(a)) to promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets.

*Supporting developing coal regions is consistent with economic efficiency and historical precedent*

66. Economically efficient access pricing would support differential pricing between pricing zones to the extent it encouraged growth and facilitated throughput and encouraged efficient investment. Growth prospects in the Gunnedah Basin are strong and the Gunnedah Basin mines already pay higher costs per tonne and per tonne kilometre than other producers in the Hunter Valley.

67. The distance disadvantage of Gunnedah Basin mines is significant, and would be worsened in the event that ARTC chose to increase prices within PZ3 – a risk which would increase in the event that ARTC ceases to apply the traditional approach to revenue allocation. It is clear the revenue allocation approach is a vital part of the existing regulatory package. To the extent that this element of the package is altered,

---

<sup>18</sup> ARTC, Revenue Allocation Review ARTC Submission to ACCC Discussion Paper, August 2014, p15.

a review of all elements, including the tariff structure and the lack of a distance taper, would be required.

68. Continuing to support growth in the Gunnedah Basin by setting charges at affordable levels is consistent with past practices in respect of the Ulan line. That is, the approach is using a proven mechanism that has been successfully applied in the past. Over time it allows all users and the broader community to benefit from lower average rail haulage costs and the growth in economic activity associated with expansion in export coal volumes.
69. The use of such arrangements is not only promoting industry development. It is also supporting competition in related (downstream) markets such as above rail haulage markets.

*Encouraging growth reduces asset stranding risk*

70. Arguably, it is in the interests of all producers to encourage growth in developing coal areas so as to replace volumes from existing mines as they are depleted and to continue to maintain and expand infrastructure to meet market needs. Coal infrastructure assets have long economic lives and failure to invest in prospective capacity to replace existing mining capacity could create higher asset stranding risks and higher costs for all existing producers.

*Efficient investment is being encouraged*

71. Work on establishing the Final Indicative Service has increased transparency on efficient train configurations across the network and the current investment framework is encouraging efficient investment as evidenced by the decisions by Gunnedah Basin producers to underwrite investments in upgrading the PZ3 network to allow bigger trains to operate into the PZ1 network, creating benefit for all users.
72. While encouraging efficient use of available capacity is an important aspect of economic efficiency, continuing to manage the total cost of rail haulage for developing regions like the Gunnedah Basin is critical to ensuring those producers maintain capacity to underwrite efficient investments into the future.

**3.2. Potential improvements**

73. ARTC's present pricing practices appear to be consistent with the approved HVAU. On the grounds that ARTC are not in contravention of the combinatorial ceiling test there is no justification for large scale change mid-way through the regulatory period via the ACCC's compliance review. To do so would introduce an unacceptable degree of regulatory risk for investments made under the present undertaking that is based on over a decade of regulatory precedent.
74. That said, some refinements to the current process could create benefits from additional certainty and transparency. The two areas of focus are:
  - Revenue allocation and reconciliation; and
  - Loss capitalisation.

*Revenue allocation and reconciliation*

75. Rather than adopt an end of year reconciliation process, structuring differential charges up-front may provide greater certainty and clarity for all users. For instance, PZ3 users would pay a charge that reflects only their direct costs for use of the PZ1 network with no reconciliation of common costs between regions, i.e. different prices will be set for PZ3 users and other users for PZ1.
76. An annual reconciliation process may still be applied to reconcile differences in actual usage and forecast usage, but the fluctuations would be relatively small. PZ1 and PZ2 users would pay charges that reflected their expected actual charges rather than be asked to top up a revenue short-fall at the end of the year.

*Loss capitalisation and revenue reallocation*

77. The market should be provided clear signals as to how capitalised losses will be recovered over time, and forecasts of the amount of revenue reallocation into future years assuming PZ3 export volumes continue to grow. This will provide greater certainty for users on how access charges are likely to move over time.