**Public Document**

# AUSTRALIAN RAIL TRACK CORPORATION LTD

# APPLICATION TO VARY THE HUNTER VALLEY COAL NETWORK ACCESS UNDERTAKING (VARIED ON 17 OCTOBER 2012) TO PROVIDE FOR THE INCORPORATION OF GAP TO TURRAWAN SEGMENTS IN THE NETWORK

## SUPPORTING DOCUMENTATION

## 28 JUNE 2013

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# 1. Executive Summary

Terms used in this supporting document are as per the definitions in ARTC's Hunter Valley Coal Network Access Undertaking accepted by the ACCC on 29 June 2011 (2011 HVAU) and varied on 17 October 2012 (2012 HVAU) unless otherwise obvious from the context.

## 1.1 Background & Context: Relevant development of ARTC's 2011 HVAU

In June 2011, the 2011 HVAU lodged by ARTC was accepted by the ACCC. This followed previous versions lodged with the ACCC in April 2009, September 2010 and April 2011 that were subject to a substantial level of consultation and ACCC review. The Network contemplated under the 2011 HVAU was as prescribed at Schedule E of the 2011 HVAU and, in broad terms, included:

- Newcastle Ports to Bengalla (via Newcastle coal lines only) including entry/exit roads to the ports to/from coal facilities south on Newcastle (referred to as Pricing Zone 1);
- Muswellbrook to Ulan (referred to as Pricing Zone 2); and
- Muswellbrook to Gap (referred to as Pricing Zone 3).

The Network prescribed in the 2011 HVAU has remained unaltered since.

In October 2012 the ACCC accepted an application by ARTC to vary the 2011 HVAU to, in broad terms, establish the Initial Indicative Service and Initial Indicative Access Charge to apply in existing Pricing Zones under the 2011 HVAU. This varied access undertaking is the 2012 HVAU.

## 1.2 Application to vary the 2012 HVAU to incorporate Gap to Turrawan Segments

In seeking coverage of the Hunter Valley coal network under the Competition and Consumer Act 2010 (CCA Act) ARTC has sought to include those parts of the Hunter Valley rail network on which coal is substantively carried to the extent that that network is managed by ARTC, and can be covered under the CCA Act.

During most of the ACCC consultation and acceptance period for the 2011 HVAU, ARTC did not manage the Hunter Valley rail network beyond Gap to the extent needed to contemplate coverage under the CCA Act. At that time, this part of the network was controlled by the Country Rail Infrastructure Authority (CRIA) and was covered, for the purposes of economic regulation, under the NSW Rail Access Undertaking (NSWRAU). Since that time, ARTC has commenced a lease of certain parts of the CRIA network north of Gap and is now in a position to seek coverage of this part of the network. The rail infrastructure from Gap to Turrawan is needed to meet the needs of Gunnedah Basin coal mines north of Gap.

Further, ARTC is required under the lease to apply to the ACCC to seek coverage of relevant parts of its network under the CCA Act. Until such coverage is approved the provisions of the NSWRAU will continue to apply.

Accordingly, this application seeks to vary the 2012 HVAU to incorporate Segments between Gap and Turrawan in the Network, prescribed at Schedule E of the varied access undertaking as:

- Gap (416.000 km) to Watermark (447.1 km);
- Watermark (447.1 km) to Gunnedah (480.075 km);
- Gunnedah (480.075 km) to Boggabri (521.455 km); and
- Boggabri (521.455 km) to Turrawan (548.485 km).

The Segments service the Gunnedah Basin coal mines Gunnedah, Boggabri and Narrabri, and proposed developments at Watermark and Maules Creek.

This variation seeks to incorporate Segments between Gap and Turrawan in the Network effective on and from 1 January 2014. ARTC has sought the variation to be effective from this date in order to align to the 2014 calendar year, consistent with timing for a range of commercial activities including pricing, contractual entitlements and performance reporting. ARTC recognises that the date of effect of the variation may be contingent upon the date of approval of the variation if such approval is not given by 1 January 2014.

Key elements of the application and documents provided to the ACCC in support of the application sought by ARTC to give effect to the incorporation of these Segments in the Network include:

- extension of the existing Pricing Zone 3 under the 2012 HVAU to incorporate these Segments into the Network on and from 1 January 2014.
- an asset valuation with respect to these Segments prepared in accordance with the 2012 HVAU and treated consistently with previous asset valuations accepted under the 2011 HVAU; and

- forecasts of Initial Indicative Access Charges for Initial Indicative Services applicable to the extended Pricing Zone 3 for the 2014 calendar year.

Extension of the existing Pricing Zone 3 will result in a number of advantages and efficiencies as all obligations provided under the 2012 HVAU will be applicable to the extended Pricing Zone 3 including:

- the loss capitalisation mechanism incorporated in the 2012 HVAU;
- the remaining mine life approved under the 2012 HVAU;
- Network KPI reporting; and
- the system-wide true-up test.

Further detail in relation to these key elements is provided in section 4 of this supporting document.

# 2. Relevant Development of ARTC's Hunter Valley Access Undertaking

## 2.1 2011 HVAU

In June 2011, the 2011 HVAU lodged by ARTC was accepted by the ACCC. This followed previous versions lodged with the ACCC in April 2009, September 2010 and April 2011 that were subject to a substantial level of consultation and ACCC review. The Network contemplated under the 2011 HVAU was as prescribed at Schedule E of the 2011 HVAU and, in broad terms, included:

- Newcastle Ports to Bengalla (via Newcastle coal lines only) including entry/exit roads to the ports to/from coal facilities south on Newcastle (referred to as Pricing Zone 1);
- Muswellbrook to Ulan (referred to as Pricing Zone 2); and
- Muswellbrook to Gap (referred to as Pricing Zone 3).

## 2.2 2012 HVAU

In October 2012 the ACCC accepted an application by ARTC to vary the 2011 HVAU to, in broad terms, establish the Initial Indicative Service and Initial Indicative Access Charges to apply in existing Pricing Zones under the 2011 HVAU. This varied access undertaking is referred to as the "2012 HVAU".

Related outcomes of the variation included the establishment and publication of Charges to apply to non-Indicative Services in each Pricing Zone.

This variation had no impact on the definition of the Network covered by the 2011 HVAU, and has remained unaltered.

Outside of the Network covered by the 2012 HVAU, ARTC negotiated access pricing for coal services to apply north of Gap as applicable. These negotiations were covered by the provisions of the NSWRAU. Access pricing was negotiated with respect to existing coal train configurations operating north of Gap that are identical to the Initial Indicative Services prescribed under the 2012 HVAU, as well as non-Indicative Services.

# 3. Gap to Turrawan Segments

In seeking coverage of the Hunter Valley coal network under the CCA Act it has always been ARTC's intention to include those parts of the Hunter Valley rail network on which coal is substantively carried to the extent that that network is managed by ARTC, and can be covered under the CCA Act.

During most of the ACCC consultation and acceptance period for the 2011 HVAU, ARTC did not manage the Hunter Valley rail network beyond Gap to the extent needed to contemplate coverage under the CCA Act. At that time, this part of the network was controlled by CRIA and was covered, for the purposes of economic regulation, under the NSWRAU. Since that time, ARTC has commenced a lease of certain parts of the CRIA network north of Gap and is now in a position to seek coverage of this part of the network. The rail infrastructure from Gap to Turrawan is needed to meet the needs of Gunnedah Basin coal mines north of Gap.

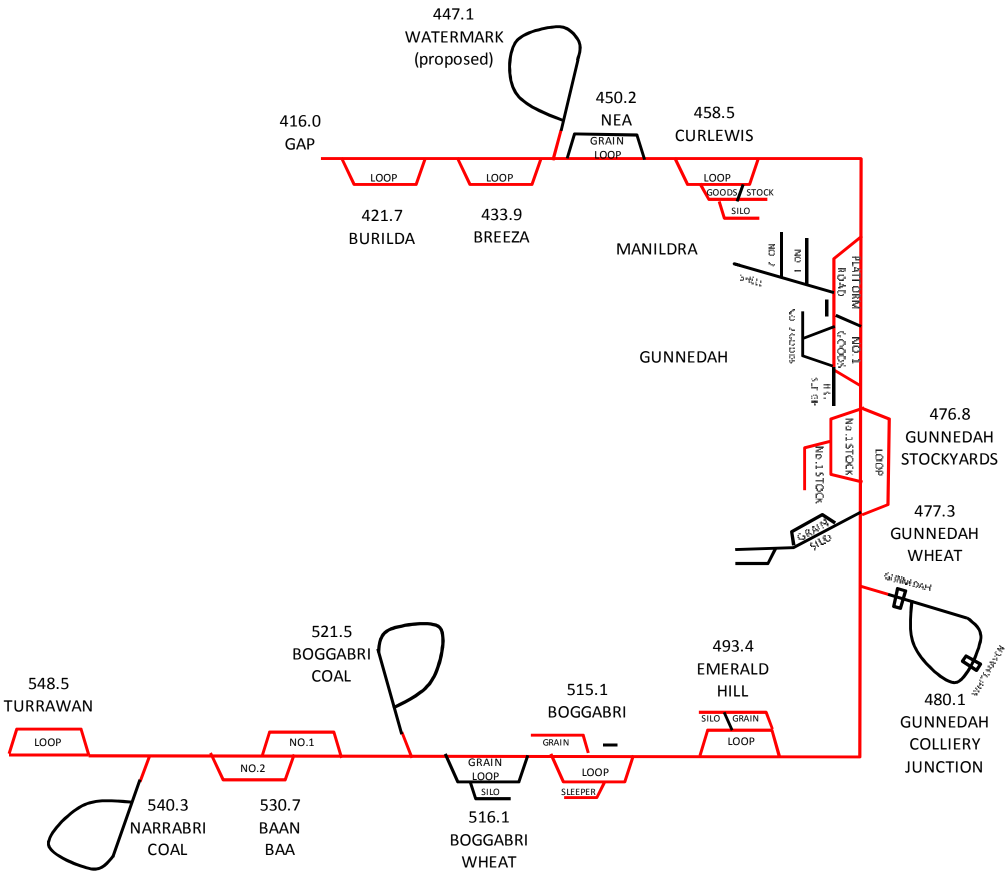
Further, ARTC is required under the lease to apply to the ACCC to seek coverage of relevant parts of its network under the CCA Act. Until such coverage is approved the provisions of the NSWRAU will continue to apply.

Accordingly, this application seeks to vary the 2012 HVAU to incorporate the following Segments between Gap and Turrawan in the Network, prescribed at Schedule E of the varied access undertaking as:

- Gap (416.0 km)to Watermark (447.1 km);
- Watermark (447.1 km) to Gunnedah (480.1 km);
- Gunnedah (480.1 km) to Boggabri (521.5 km); and
- Boggabri (521.5 km) to Turrawan (548.5 km).

The Gap to Turrawan Segments service the Gunnedah Basin coal mines Gunnedah, Boggabri and Narrabri, and proposed developments at Watermark and Maules Creek. The Network north of Gap is schematically described at Figure 1 below.

**Figure 1**




In making this application, ARTC proposes to incorporate the Gap to Turrawan Segments in the existing Pricing Zone 3 under the 2012 HVAU. The alternative would have been to create an additional pricing zone. ARTC considers that incorporating the Gap to Turrawan Segments in the existing Pricing Zone 3 under the 2012 HVAU is appropriate for a number of reasons, including:

- All coal trains emanating from the Gap to Gunnedah Segments are also operated over the entirety of the existing Pricing Zone 3.
- The infrastructure configuration and capacity in the Gap to Turrawan Segments is similar to that for the existing Pricing Zone 3.
- Network management arrangements on the Gap to Turrawan Segments are the same as the arrangements on the existing Pricing Zone 3.
- Access Holders accessing the Gap to Turrawan Segments, and the commercial arrangements under which access is provided, is similar to that in the existing Pricing Zone 3.

- Both the existing Pricing Zone 3 Segments and the Gap to Turrawan Segments[1] are currently expected to be unconstrained.

ARTC also considers that a number of advantages and efficiencies will arise from incorporating the Gap to Turrawan Segments into the existing Pricing Zone 3 under the 2012 HVAU, including:

- A single Charge for the Initial Indicative Service, Interim Service and other non-Indicative Services will apply with respect to the extended Pricing Zone 3 under the varied 2012 HVAU, making for simpler and more efficient pricing arrangements.
- A single application of the RAB and RAB Floor Limit roll-forward, loss capitalisation, Pricing Limits and Unders & Overs accounting would apply to Segments in the extended Pricing Zone 3 under the varied 2012 HVAU.
- A single application of the system wide true-up test would apply to the extended Pricing Zone 3 under the varied 2012 HVAU.

ARTC does not envisage any significant adverse outcomes arising from the incorporation of the Gap to Turrawan Segments into the existing Pricing Zone 3 under the 2012 HVAU,

[1] The NSW Independent Pricing and Regulatory Tribunal recently determined that revenue for that part of the network between Gap and Turrawan was less than 80% of ceiling under the NSWRAU for the 2011/12 financial year.

# 4. Key elements of ARTC's proposal to vary the 2012 HVAU

## 4.1 Timing considerations in relation to the proposed variation

### 4.1.1 Date of effect of the variation

This variation seeks to incorporate Segments between Gap and Turrawan in the Network effective 1 January 2014. ARTC has sought the variation to be effective from this date in order to align to the 2014 calendar year, consistent with timing for a range of commercial activities including pricing, contractual entitlements, annual compliance assessment and performance reporting. ARTC recognises that the date of effect of the variation may be contingent upon the date of approval of the variation if such approval is not given by 1 January 2014.

### 4.1.2 Asset valuation

In this application, ARTC has proposed a valuation of the assets forming the Gap to Turrawan Segments as at 1 January 2013, representing the time at which the valuation was being carried out. ARTC considers this approach to be reasonable in the circumstances given that the 2012 HVAU requires assets to be valued on the basis of replacement by commercially efficient application of best known currently available technology based on existing capacity and performance characteristics of assets[2]. This approach is also consistent with that adopted in relation to previous valuations accepted by the ACCC under the 2011 HVAU in relation to the Dartbrook to Gap Segments and Leased PWCS Coal Loop Assets where the date of valuation is ahead of regulatory approval.

For the purposes of forecasting Initial Indicative Access Charges to apply to the Gap to Turrawan Segments for the 2014 calendar year as provided in this application, ARTC has rolled forward this asset valuation to 1 January 2014 in accordance with the roll forward principles of the applicable access undertaking, the NSWRAU. Details of the roll forward are incorporated in confidential financial modelling underpinning the forecasts provided to the ACCC. Consistent with the approach taken with respect to the initial annual compliance assessment under the 2011 HVAU (for the second half of 2011), the ACCC will be able to consider compliance of the roll forward with the varied 2012 HVAU as part of the 2014 calendar year compliance assessment.

[2] 2012 HVAU Section 4.4(a)(ii)

### 4.1.3 Application of Charges

ARTC considers that it is appropriate, at the same time the ACCC is considering the asset valuation, that Initial Indicative Access Charges applicable to the 2014 calendar be approved by the ACCC as part of this variation. ARTC understands that, in normal circumstances, Initial Indicative Access Charges for the 2014 calendar year would be finalised as part of the process for finalising Indicative Access Charges contemplated under Section 4.20 of the 2012 HVAU. ARTC also understands that Charges for non-Indicative Services applicable to the 2014 calendar year are to be finalised at around the same time.

In order to inform stakeholders, and for the ACCC's consideration, has submitted forecast Initial Indicative Access Charges applicable to the 2014 calendar year are set out in Table 3 in section 4.3.9 below. These charges are based on current expectations of volumes and costs in the 2014 calendar year for Gap to Turrawan Segments. Further information in relation to the development of forecast Initial Indicative Access Charges for the extended Pricing Zone 3 is provided at Attachment 1 to this supporting document. ARTC will provide confidential financial modelling underpinning these forecasts to the ACCC.

ARTC recognises that current expectations of volumes and costs in the 2014 calendar year may differ from variations proposed by Access Holders in accordance with section 4.20(a) of the 2012 HVAU. Once 2014 volumes are finalised and ARTC has consulted on the Initial Indicative Access Charge for the extended Pricing Zone 3 with Access Holders, and prior to this application being approved by the ACCC, ARTC will resubmit a finalised 2014 Initial Indicative Charge for Pricing Zone 3 for the ACCC's approval.

## 4.2 Proposed 2012 HVAU amendments

A description of each amendment to the 2012 HVAU proposed by ARTC in order to, in ARTC's view, give effect to the incorporation of the prescribed Segments between Gap and Turrawan in the Network effective on and from 1 January 2014 is provided at Figure 4 of Attachment A to the application to vary the ARTC Hunter Valley Access Undertaking dated 28 June 2013 to incorporate the Gap to Turrawan Segments.

It should be noted that, for reasons of efficiency, ARTC has also sought to adjust the definition of some other Network Segments in order to incorporate some update segment numbering as part of this application to vary the 2012 HVAU. This nature of these adjustments is administrative only.

## 4.3 Other elements of the proposed variation

With respect to a number of provisions, no amendments are proposed in relation to the incorporation of the Gap to Turrawan Segments. In such cases, relevant provisions as they apply to Segments in the existing Pricing Zone 3 under the 2012 HVAU will simply extend to the Gap to Turrawan Segments by virtue of the inclusion of these Segments in Pricing Zone 3. In order to inform stakeholders of other impacts of the proposed variation, some of the key existing elements of the 2012 HVAU that would apply to the Gap to Turrawan Segments are described below.

### 4.3.1 Floor Limit Ceiling Limits (Section 4.2 and 4.3)

Under Sections 4.2 and 4.3 of the 2012 HVAU, Access revenue is compared with the Floor Limit and the Ceiling Limit. In particular, the comparison with the Ceiling Limit, commonly known as the ceiling test is a stand-alone combinatorial test based on combinations of Access Holders and on a Segment basis. The group of Segments forming each Pricing Zone relates largely to the application of coal access pricing and is not expected to have any material impact on the application of the ceiling test.

Section 4.3 of the 2012 HVAU also contemplates the application of the ceiling test with respect to Segments in Pricing Zone 3 (including Gap to Turrawan Segments) where RAB equals or falls below the RAB Floor Limit for those Segments. This test recognises the existence, and ability to recover, prior year economic losses with respect to applicable Segments outside of the existing constrained Network. As this is also a Segment based test, the inclusion of Gap to Turrawan Segments in Pricing Zone 3 is unlikely to have any impact on the application of the ceiling test.

### 4.3.2 Asset Valuation (Section 4.4(a))

Under Section 4.4(a)(ii) of the 2012 HVAU, assets that have not been ascribed a regulatory asset value in accordance with the NSWRAU in force at the time immediately preceding the Commencement Date are initially valued using the depreciated optimised replacement cost (DORC) method of valuing assets, and approved by the ACCC. The optimised replacement cost means the cost of replacement by commercially efficient application of best known currently available technology based on existing capacity and performance characteristics of the assets.

As indicated earlier, and consistent with earlier valuations approved by the ACCC for the 2011 HVAU, ARTC has commissioned engineering consultants Evans & Peck (with support from WorleyParsons and other engineering consulting expertise) to carry out a DORC valuation of the Gap to Turrawan Segment assets as at 1 January 2013. The consultant's report for this valuation is provided at Attachment C to the application to vary the ARTC Hunter Valley Access Undertaking dated 28 June 2013 to incorporate the Gap to Turrawan Segments.

The DORC and ORC valuation with respect to each of the four Gap to Turrawan Segments is shown at Table 2 below.

**Table 2**

| Segment (Length) | ORC ($m) | ORC/km ($m) | DORC ($m) | DORC/KM ($m) |
|---|---|---|---|---|
| **Gap to Watermark (31.1km)** | 160.8 | 4.69 | 78.5 | 2.28 |
| **Watermark to Gunnedah (33.0km)** | 174.5 | 4.63 | 94.5 | 2.51 |
| **Gunnedah to Boggabri (41.4km)** | 190.1 | 4.02 | 92.1 | 1.95 |
| **Boggabri to Turrawan (27.0km)** | 132.2 | 4.90 | 59.8 | 2.30 |
| **Network Control Centre - allocation** | 0.7 | | 0.5 | |
| **Total (132.5km)** | **658.3** | **4.50** | **325.4** | **2.22** |

Key aspect of the consultant's valuations are summarised as follows:

- 14 different asset classifications were identified and separately valued, such as rail, sleepers, turnouts, grade (earthworks), ballast, bridges, signalling and telecommunications.

- Assets were identified with, and valued in, four separate Segments as described in Table 2 above.

- Assets were identified on the basis of MEERA (Modern Engineering Equivalent Replacement Asset), which represents common practice.

- The asset valuation process undertaken (summarised in the diagram at page 8 of the report) consisted of:

    - asset valuation involving a process of classifying the asset and undertaking a rate build-up from first principles to value the asset;

- review of the relevant asset standards to determine the appropriate MEERA value;
- review of each asset group's practical capacity or useful life to allow for the determination of an optimisation factor; and
- asset condition assessment in comparison with the useful life of the asset to determine the remaining life and depreciation factor.

- MEERA assets were determined:

  - based on providing an equivalent level of capacity and performance as the existing asset (25T axle load) but not necessarily identical to that asset;
  - based on ARTC standards unless specified otherwise; and
  - based on the line utilisation and axle loading for track (including rail, fixings and sleepers), formation including ballast and sub-base, and bridges and other load bearing structures.

- Asset pricing techniques ranged from detailed first-principle estimates to comparisons with reference-class benchmarks, depending on a range of factors including complexity, available data and/or benchmarks and the nature of the works involved.

- MEERA values incorporated contractor direct costs and mark ups for miscellaneous costs, contractor indirect costs and client costs in accordance with accepted practice[3]. Refer Section 4.3 of the consultant's report for further details.

- Installation under railway Brownfields (country) conditions was assumed, consistent with NSW Treasury Standard TPP07 for asset valuation, with conservative assumptions including no penalty rates, and no additional costs for track access such as access roads.

- Existing network utilisation is around 16MGTpa (Gap to Gunnedah) and 10MGTpa (Gunnedah to Turrawan). Historical utilisation was based on ARTC estimates to 1998-99 and earlier estimates assumed minimal coal.

- A review of existing network utilisation by coal operations, including campaign haulage, indicated that the existing track alignment and substantial parts of the existing configuration such as loop placement and length would be needed to meet current

[3] Department of Infrastructure, Transport and Regional Development and Local Government, Best Practice Cost Estimation Standard for Publicly Funded Road and Rail Construction.

capacity and performance requirements on a stand-alone coal basis. Certain assets that were identified as providing no benefit to coal operations were excluded.

- Optimisation factors were developed were appropriate to discount existing asset valuation to reflect differences with respect to optimised assets in terms of practical capacity and useful life, where appropriate. Development of optimisation factors were specific to asset classification and considered the nature and capacity of the existing assets, current railway infrastructure technologies and historical data.

- The basis for depreciation of assets was specific to each asset classed and the basis ranged from asset utilisation, asset condition or age depending on such things as historically accepted practice and availability of historical utilisation, condition and age data.

- An allocation of relevant estimated Network Control Centre capital assets was made to Gap to Turrawan Segments on the basis of train kilometres in accordance with the cost allocation provisions in the 2012 HVAU.

- A broad comparison with similar contemporary constructions in the Hunter Valley and other jurisdictions such as the Northern Missing Link component of the Goonyella to Abbott Point Expansion (GAPE) on the Central Queensland Coal Region, and the third track between Minimbah and Maitland in the lower Hunter Valley endorsed by industry, reveal significantly higher costs of construction per kilometre than that proposed in the report, even after considering the different circumstances of each construction.

The Gap to Turrawan valuation recognises that certain assets currently in place in these Segments may not represent MEERA assets. As described above, the asset valuation itself contemplates optimisation factors where appropriate in relation to each asset class. Key areas of MEERA optimisation are in major track assets including rail and sleepers. The optimisation factors have the effect of reducing the value of MEERA asset to reflect the age and condition profile of the existing assets.

As an example, the value of a MEERA concrete sleeper considered to have a 50 year life is reduced by 60% (optimisation factor 40%), to reflect the capacity of an existing, say, timber sleeper considered to have a 20 year life. This effectively means that an existing timber sleeper with 10 years life remaining (50% consumed) is equivalent to a MEERA concrete sleeper with 10 years life remaining (80% consumed).

In order to add further robustness to the determination of costs identified with the Gap to Turrawan Segments under the varied 2012 HVAU, ARTC has considered approaches to ensure that there is consistency between optimisation assumptions in the asset valuation and the treatment of maintenance expenditure. Specifically, maintenance expenditure included in Economic Cost should be based on consistent optimisation assumptions to those made in the asset valuation, in particular where optimised MEERA assets are assumed. For example, allowable maintenance expenditure should relate to a MEERA concrete sleeper with 10 years life remaining (80% consumed) rather than an existing timber sleeper with 10 years life remaining (50% consumed).

ARTC notes that the ACCC considers this treatment of costs in its determination with respect to ARTC's annual compliance with the 2011 HVAU for the period 1 July 2011 to 31 December 2011 (and specifically in relation to the proposed valuation of Port Waratah coal loop assets), as follows:

*'The ACCC considers that while ARTC has undertaken comprehensive analysis of the replacement costs of the Port Waratah Coal Loop Assets, a comparable analysis has not been undertaken for the cost savings arising from the optimisation of the assets. The ACCC considers that optimisation should include:*

- *optimisation of the configuration of the network to remove stranded, redundant and excess assets (such as rail sidings, loops, turnouts or spur lines that are no longer used); and*
- *optimisation to reflect the modern engineering equivalent of assets, including recognition of cost savings and productivity gains due to technological advancement.*

*Accordingly, the ACCC has some reservations about the approach to DORC valuation taken by ARTC, and considers that the cost savings and productivity gains arising from installing the modern engineering equivalent have not have been fully reflected in the optimisation of the Port Waratah Coal Loop Assets.'*[4]

ARTC has over the last five years delivered substantial investments required by industry in the Gap to Turrawan Segments aimed at meeting expected coal demand from the Gunnedah basin region. This investment program is continuing and ARTC expects that this will result in the installation of substantively an asset base at modern engineering standards, such as concrete sleepers and 60kg rail within 3 years. As such, ARTC considers that the need to consider the maintenance impacts reflecting modern

[4] ACCC Determination, Australian Rail Track Corporation's compliance with pricing principles in the Hunter Valley Rail Network Access Undertaking for July – December 2011, 5 April 2013, p7.

engineering equivalent (MEERA) will be relatively short lived. In fact, in relation to sleepers, ARTC expects that the Gap to Turrawan Segments (Mainline) will be entirely concrete sleepered during 2013.

As such, ARTC considers that the most efficient approach to addressing the maintenance impacts reflecting modern equivalent assets is to identify any necessary adjustments to maintenance expenditure each year as part of the annual compliance assessment carried out by the ACCC in relation to the Gap to Turrawan Segments assets.

It should be noted that the earlier Hunter Valley regulatory asset valuation conducted by IPART (2000) effectively for Pricing Zones 1 and 2, explicitly contemplated similar maintenance expenditure adjustments as part of overall optimisation of assets but adopted broader optimisation assumptions in order to avoid the need for such maintenance expenditure adjustments.

### 4.3.3 RAB Roll Forward (Loss Capitalisation) (Section 4.4(a))

Section 4.4(a) of the 2012 HVAU provides for RAB to be determined by annual roll forward of the starting RAB to effectively capitalise any economic losses incurred in a year into the RAB. The subsequent comparison each year of RAB with the RAB Floor Limit (determined in a more traditional manner) in Pricing Zone 3 as described in Section 4.3.1 above enables the access provider to obtain revenue, where the market permits, in excess of the traditional ‘building blocks’ Ceiling Limit to the extent of recovering any prior year economic losses that have been capitalised into the RAB.

The RAB and RAB Floor Limit roll forwards are required to be carried out at a Segment level, as is the above RAB/RAB Floor Limit comparison which gives effect to the accumulation and recovery of economic losses (loss capitalisation). ARTC would not expect the incorporation of Gap to Turrawan Segments in Pricing Zone 3 to have any significant impact of the application of the roll forwards, and application of loss capitalisation under the varied 2012 HVAU.

In any event, the incurring of economic losses in the existing Pricing Zone 3 under the 2012 HVAU arises from the stand alone utilisation by Access Holders emanating from the Gap to Turrawan Segments. Recovery of those losses, where the market permits, would also come from those Access Holders. As such the incorporation of Gap to Turrawan Segments in Pricing Zone 3 is unlikely to result in any significant allocative or equity impacts

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#### 4.3.4 Cost Allocation (Section 4.6)

Section 4.6 of the 2012 HVAU deals with the principles for the allocation of non-Segment Specific Costs and depreciation of, and return on, non-Segment Specific Assets to Segments.

As such, the incorporation of Gap to Turrawan Segments in Pricing Zone 3 is not expected to have any impact on the allocation of such costs to Segments.

#### 4.3.5 Remaining Mine Life (Section 4.7)

Section 4.7 of the 2012 HVAU requires depreciation to be calculated based on the remaining useful life of assets having regard to among other things, the average remaining mine of coal mines utilising a Pricing Zone.

As coal mines utilising the Segments forming the existing Pricing Zone 3 under the 2012 HVAU and those utilising the Gap to Turrawan Segments are the same, ARTC does not consider that there is any basis upon which to revise the remaining mine life with respect to Pricing Zone 3 Segments under the varied 2012 HVAU..

#### 4.3.6 Annual Compliance Assessment (Section 4.10)

In broad terms, Section 4.10 of the 2012 HVAU requires ARTC to annually submit documents detailing RAB/RAB Floor Limit roll forwards and applicable comparisons (as described above) and, where applicable, documentation detailing the reconciliation of revenue with the applicable Ceiling Limit and calculation of the total unders and overs amounts.

The ACCC is required to determine compliance with the relevant provisions of the 2012 HVAU.

As described earlier these applications are Segment based and, as described earlier, the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 is not expected to have any significant impact on these applications and therefore the conduct of the annual compliance assessment.

#### 4.3.7 Unders and overs accounting (Section 4.9)

As described above, the incorporation of Gap to Turrawan Segments in Pricing Zone 3 is not expected to have any significant impact on the application of the ceiling test and any resulting total unders and overs amount. The allocation of the total unders and overs amount to Constrained Coal Customers is on the basis of revenue paid on the Constrained Coal Network.

In the first instance, Segments in the extended Pricing Zone 3 are expect to not form part of the Constrained Network and as such, Section 4.9 of the 2012 HVAU is not applicable to Access Holders utilising the Gap to Turrawan Segments.

In the future, if and when the Constrained Network expands into the extended Pricing Zone 3, the allocation of any applicable unders and overs amount to Access Holders utilising the Gap to Turrawan Segments will commence at that time and any historical grouping of Segments in Pricing Zone 3 will no longer be relevant.

#### 4.3.8 Indicative Access Services and Access Charges (Section 4.14)

Indicative Services and Indicative Access Charges will be determined and approved as part of the review contemplated at Section 4.18 of the varied 2012 HVAU.

The incorporation of the Gap to Turrawan Segments in Pricing Zone 3 means that the Indicative Service and Indicative Access Charge prescribed for the extended Pricing Zone 3 under the varied 2012 HVAU will apply to all Segments in the extended Pricing Zone 3, including Gap to Turrawan Segments.

ARTC considers it likely that, given the nature of coal operations in the Hunter Valley, HVCCC coal chain modelling will identify the Indicative Service with characteristics that are identical over all Segments in the extended Pricing 3 under the varied 2012 HVAU. ARTC does not consider that the incorporation of Gap to Turrawan Segments in Pricing Zone 3 will impact the specification of the Initial Indicative Service for the extended Pricing Zone 3 under the varied 2012 HVAU.

ARTC will develop the Indicative Access Charge applicable to the Indicative Service for the extended Pricing Zone 3 under the varied 2012 HVAU for the approval of the ACCC, in accordance with Section 4.18 of the varied 2012 HVAU.

#### 4.3.9 Initial Indicative Services and Access Charges (Section 4.17)

The incorporation of the Gap to Turrawan Segments in Pricing Zone 3 means that the Initial Indicative Service and Initial Indicative Access Charge prescribed for the extended

Pricing Zone 3 under the varied 2012 HVAU will apply to all Segments in the extended Pricing Zone 3, including Gap to Turrawan Segments.

ARTC considers that the Initial Indicative Service prescribed for the existing Pricing Zone 3 under the 2012 HVAU was determined with respect to HVCCC coal chain modelling that had regard for the Hunter Valley coal chain operations beyond the ARTC Network at the time. As such, ARTC does not consider that the incorporation of Gap to Turrawan Segments in Pricing Zone 3 will impact the specification of the Initial Indicative Service for the extended Pricing Zone 3 under the varied 2012 HVAU.

Access Holders utilising the Gap to Turrawan Segments all utilise the entirety of the Segments forming the existing Pricing Zone 3 under the 2012 HVAU. As such, ARTC does not consider that the specification of an Indicative Access Charge to apply to all Segments in the extended Pricing Zone 3 to have any significant allocative or equity impacts.

ARTC's determination and proposal of the forecast Initial Indicative Access Charge for the extended Pricing Zone 3 has had regard to:

- ARTC's current forecast of coal volumes from mines served by the extended Pricing Zone 3 in 2014, being Werris Creek, Gunnedah, Boggabri, Maules Creek and Narrabri;
- ARTC's current forecast of operating expenditure (including allocation of non-Segment Specific Costs in accordance with the 2012 HVAU) for the extended Pricing Zone 3;
- RAB and RAB Floor Limit roll-forward of assets in the extended Pricing Zone 3 as at 1 January 2013 based on:
    - starting RAB for extended Pricing Zone assets already covered by the 2012 HVAU (Dartbrook to Werris Creek) being the closing RAB for such assets currently proposed in ARTC's annual compliance submission for 2012;
    - starting RAB for extended Pricing Zone 3 assets subject to this variation (Gap to Turrawan) being DORC values proposed as part of this variation;
    - estimates of forecast inflation for 2013 and 2014;
    - revenue, operating expenditure and capital expenditure forecasts for 2013 and 2014; and
    - extended Pricing Zone 3 remaining mine life approved under the 2012 HVAU;
- The existing 2013 Initial Indicative Access Charge for Pricing Zone 3 under the 2012 HVAU and Charges negotiated for 2013 with respect to Gap to Turrawan Segments;

- Differentiation of other Charges for Coal Access Rights in the extended Pricing Zone 3 in accordance with committed principles prescribed in ARTC's 2012 Initial Indicative Service and Access Charge variation application; and
- The pricing objectives set out in section 4.13 of the 2012 HVAU.

The forecast Initial Indicative Service and Access Charge for 2014 at this time for the extended Pricing Zone 3 under the varied 2012 HVAU is prescribed at Table 3 below.

**Table 3**

**2014 Initial Indicative Service and Access Charge**

| **Segments** | **Non-TOP $/kgtkm (ex GST)** | **TOP $/kgtkm (ex GST)** | **Initial Indicative Service Characteristics** |
|---|---|---|---|
| **In Pricing Zone 3*** | | | |
| Initial Indicative Service 1 | 0.958 | 6.276 | 25 tonne axle load<br>80 kph maximum speed (loaded)<br>80 kph maximum speed (empty)<br>82 wagon length<br>1350 metres maximum train length<br>Section run times as per applicable Hunter Valley standard working timetable |

*Pricing Zone 3 contains Segments as specified at Schedule E (including Segments for the extended Pricing Zone 3)

Further information in relation to the development of forecast Initial Indicative Access Charges for the extended Pricing Zone 3 is provided at Attachment 1 to this supporting document. ARTC will provide confidential financial modelling underpinning the above forecasts to the ACCC.

As stated at section 4.1.3 of this supporting document, ARTC recognises that current expectations of volumes and costs in the 2014 calendar year may differ from variations proposed by Access Holders in accordance with section 4.20(a) of the 2012 HVAU. Accordingly, the forecast Initial Indicative Access Charges may be different from those notified by ARTC under Section 4.20(d) of the 2012 HVAU later in the 2013 calendar year.

Once 2014 volumes are finalised and ARTC has consulted on the Initial Indicative Access Charge for the extended Pricing Zone 3 with Access Holders, and prior to this application being approved by the ACCC, ARTC will resubmit a finalised 2014 Initial Indicative Charge for Pricing Zone 3 for the ACCC's approval.

### 4.3.10 Interim Services and Charges for Services having the characteristics of Interim Services (Section 4.19)

As Interim Services and Interim Access Charges under the 2012 HVAU are not ‘indicative’ Charges as contemplated under the 2011 HVAU, it is not ARTC’s intention to prescribe Interim Services and Interim Access Charges for the 2014 calendar year in the varied 2012 HVAU. The 2012 HVAU only contemplates specification and approval by the ACCC of Initial Indicative Access Charges.

Under the 2011 HVAU, Interim Indicative Services and Interim Indicative Access Charges were considered ‘indicative’ and, as such were prescribed in the 2011 HVAU as approved by the ACCC as at the Commencement Date and for Pricing Zones as prescribed under the 2011 HVAU. Prescription and approval of these interim measures under the 2011 HVAU was considered appropriate at the time in the absence of the development of Initial Indicative Services and Initial Indicative Access Charges which were intended to act as a basis for differentiation under Section 4.15(a) of the 2012 HVAU, and to encourage efficient utilisation of Capacity and Coal Chain Capacity. As Interim Services are not considered to represent efficient utilisation of Capacity and Coal Chain Capacity, Interim Access Charges should not be considered in setting Charges for non-Indicative Services. Once Initial Indicative Services and Initial Indicative Access Charges were approved as part of the 2012 HVAU, previous Interim Indicative Access Charges under the 2011 HVAU ceased to be ‘indicative’ and therefore subject to price differentiation in accordance with Section 4.15 of the 2012 HVAU, similar to other ‘non-indicative’ charges. In any event, ARTC expects that relevant Access Holders will predominantly utilise Initial Indicative Services in the extended Pricing Zone 3 in the 2014 calendar year.

However, the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 means that Charges for Services having the characteristics of an Interim Service in the extended Pricing Zone 3 under the varied 2012 HVAU will apply to all Segments in the extended Pricing Zone 3, including Gap to Turrawan Segments.

As the Interim Service in Pricing Zone 3 as currently prescribed under the 2012 HVAU operates in the Gap to Turrawan Segments, ARTC does not consider that the incorporation of Gap to Turrawan Segments in Pricing Zone 3 will be problematic in terms of Service or Charge specification under the varied 2012 HVAU, for similar reasons as described above for Initial Indicative Services and Initial Indicative Access Charges.

ARTC’s determination of the Charge for Services having the characteristics of an Interim Service in the extended Pricing Zone 3 under the varied 2012 HVAU has had regard to differentiation in accordance with Section 4.15(a) of the 2012 HVAU and in accordance with committed principles prescribed in ARTC's 2012 Initial Indicative Service and Access Charge variation application.

The forecast Charge for Services having the characteristics of an Interim Service in the extended Pricing Zone 3 under the varied 2012 HVAU for 2014 at this time is prescribed at Table 3 below.

**Table 4**

**2014 Charge for Services having the characteristics of the Interim Service**

| **Segments** | **Non-TOP $/kgtkm (ex GST)** | **TOP $/kgtkm (ex GST)** | **Service Characteristics** |
|---|---|---|---|
| **In Pricing Zone 3*** | | | |
| | 0.958 | 6.572 | 25 tonne axle load<br>80 kph maximum speed (loaded)<br>80 kph maximum speed (empty)<br>72 wagon length<br>Section run times as per applicable Hunter Valley standard working timetable |

*Pricing Zone 3 contains Segments as specified at Schedule E of the varied 2012 HVAU (including Segments for the extended Pricing Zone 3)

Further information in relation to the development of forecast Charge for Services having the Characteristics of an Interim Service for the extended Pricing Zone 3 is provided at Attachment 1 to this supporting document. ARTC will provide confidential modelling demonstrating the basis of development of the 2014 Charge in Table 4 to the ACCC.

As stated at section 4.1.3 of this supporting document, ARTC recognises that current expectations of volumes and costs in the 2014 calendar year may differ from variations proposed by Access Holders in accordance with section 4.20(a) of the 2012 HVAU. Accordingly, the forecast Charge for Services having the characteristics of the Interim Service may be different from those notified by ARTC under Section 4.20(d) of the 2012 HVAU later in the 2013 calendar year.

### 4.3.11 Non-Indicative Services and Access Charges (Section 4.15)

For clarity, references to non-Indicative Services and Charges for non-Indicative Services do not apply to Interim Services or Charges for Services having the characteristics of an

Interim Service in the extended Pricing Zone 3 under the varied 2012 HVAU as contemplated in Section 4.3.10 of this supporting document.

There is no requirement to prescribe non-Indicative Services and Charges for non-Indicative Services in the varied 2012 HVAU, nor seek ACCC approval for these Services and Charges.

Having said this, the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 means that Charges for non-Indicative Services in the extended Pricing Zone 3 under the varied 2012 HVAU will apply to all Segments in the extended Pricing Zone 3, including Gap to Turrawan Segments.

As non-Indicative Services in Pricing Zone 3 as currently prescribed under the 2012 HVAU operate in the Gap to Turrawan Segments, ARTC does not consider that the incorporation of Gap to Turrawan Segments in Pricing Zone 3 will be problematic in terms of Service or Charge specification under the varied 2012 HVAU, for similar reasons as described above for Initial Indicative Services and Initial Indicative Access Charges.

ARTC's determination of the Charge for non-Indicative Services in the extended Pricing Zone 3 under the varied 2012 HVAU has had regard to differentiation in accordance with Section 4.15(a) of the 2012 HVAU and in accordance with committed principles prescribed in ARTC's 2012 Initial Indicative Service and Access Charge variation application.

ARTC will provide confidential modelling demonstrating the extent of differentiation inherent in the Charges for non-Indicative Services to the ACCC.

#### 4.3.12 Charges for non-Coal Access Rights (Section 4.15)

ARTC does not currently prescribe Charges for non-Coal Access Rights in the Hunter Valley specific to Pricing Zone. As such, the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 is unlikely to impact on the structure, development or publishing of Charges for non-Coal Access Rights in the Hunter Valley.

#### 4.3.13 Process for finalising Indicative Access Charges (Section 4.20)

As the Access Holders utilising the Gap to Turrawan Segments all utilise the entirety of the Segments forming the existing Pricing Zone 3 under the 2012 HVAU, ARTC does not consider that the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 will have any significant impact on the application of Section 4.20 of the varied 2012 HVAU. This would include the operation of the dispute thresholds.

#### 4.3.14 Provision of forecast information and coal volumes (Section 4.21)

Where any forecasted information is provided at a Pricing Zone level, the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 will means that such information will be aggregated of the existing Pricing Zone 3 and the Gap to Turrawan Segments.

#### 4.3.15 Additional Capacity – Rail Capacity Group (Section 9.2)

As the Access Holders utilising the Gap to Turrawan Segments all utilise the entirety of the Segments forming the existing Pricing Zone 3 under the 2012 HVAU, ARTC does not consider that the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 will have any significant impact on the application of Section 9.2 of the varied 2012 HVAU. This would include the operation of membership threshold requirements and voting rights.

#### 4.3.16 Additional Capacity – Endorsement of project development stages (Section 9.8)

As the Access Holders utilising the Gap to Turrawan Segments all utilise the entirety of the Segments forming the existing Pricing Zone 3 under the 2012 HVAU, ARTC does not consider that the incorporation of the Gap to Turrawan Segments in Pricing Zone 3 will have any significant impact on the application of Section 9.8 of the varied 2012 HVAU. This would include the operation of the endorsement thresholds.

#### 4.3.17 Annexure A Indicative Access Holder Agreement (IAHA)

ARTC's application to vary the 2012 HVAU dated 28 June 2013 to incorporate the Gap to Turrawan Segments, and to include these Segments in an extended Pricing Zone 3 does not contemplate any amendments to Tier 1 or Tier 2 provisions of the IAHA. As such, ARTC does not consider that any existing Access Holder Agreements will be impacted by the application of Clause 19.1(b)(i) of those agreements. Similarly, ARTC does not consider that there are any amendments to the Indicative Access Holder Agreement proposed that are inconsistent with existing Access Holder Agreements, other than the introduction the extension of the Network proposed in the application.

No amendments will need to be made to existing Access Holder Agreements as a result of ARTC's proposed variation to the 2012 HVAU. Each existing Access Holder Agreements accurately describes the relevant part of the Network applicable to the prescribed Access Rights contemplated in the relevant Train Path Schedule.

For example, existing Access Holder Agreements for Access Holders utilising the extended Pricing Zone 3 already contemplate the relevant parts of the network they utilise and commercial arrangements for the Gap to Turrawan Segments. These arrangements were put in place with the intention, and contemplate that the Gap to Turrawan Segments will be incorporated into the 2012 HVAU.

The provisions of existing Access Holder Agreements for Access Holders utilising the extended Pricing Zone 3 will not be materially impacted by the proposed variation. Where existing Access Holder Agreements contain provisions in relation to the Gap to Turrawan Segments, the proposed variation will simplify and make these existing arrangements more efficient.

Some relatively minor outcomes arising from the proposed variation that are highlighted for the information of stakeholders include the following:

- Network Path Capability (Schedule 2). With respect to the extended Pricing Zone 3, ARTC does not propose to alter the point on the Network at which Network Path Capability is measured, being Werris Creek. As Coal Access Rights to the Gap to Turrawan Segments are substantively the same with respect to Pricing Zone 3 Segments south of Gap, ARTC does not consider that this will have a material impact on the application of the System True Up Test contemplated at Schedule 2 of existing applicable Access Holder Agreements.

- For the same reason, ARTC does not anticipate any material impact on the application of a range of other provisions in existing applicable Access Holder Agreements, including:

    - Access Rights (Clause 3) such as Path Usages, Tolerance and Monthly Tolerance Cap;
    - Capacity Under-Utilisation (Claude 11.4);
    - Capacity Transfer (Clause 16); and
    - Charges (Schedule 3) and Rebates (Clause 5.4).

# FORECAST 2014 INITIAL INDICATIVE ACCESS CHARGES (2014 IIAC) AND 2014 INTERIM ACCESS CHARGES (2014 IAC) FOR PRICING ZONE 3 UNDER THE VARIED ARTC 2011 HUNTER VALLEY COAL NETWORK ACCESS UNDERTAKING (VARIED 2011 HVAU)

## 1. Forecast 2014 IIAC and 2014 IAC

**Table 1**

| Service[1] | Pricing Zone 3 | |
|---|---|---|
| | Non-TOP $/kgtkm (ex GST) | TOP $/kgtkm (ex GST) |
| Initial Indicative Service 1 | 0.958 | 6.276 |
| Interim Service 1 | 0.958 | 6.572 |

[1]Initial Indicative Services for Pricing Zone 3 as prescribed at Varied 2011 HVAU Section 4.17(d1) and Interim Service as prescribed at Varied 2011 HVAU Section 4.19(c).

2014 IIAC and 2014 IAC have been developed using ARTC modelling consistent with the development of 2013 Initial Indicative Access Charges under the 2011 Hunter Valley Coal Network Access Undertaking, having regard to the 17 October 2012 ACCC Decision[5], and based on forecast volume and cost information as summarised below.

## 2. 2014 Forecast Aggregate Coal Volumes

**Table 2**

| Million tonnes | Export | Domestic |
|---|---|---|
| 2014 Aggregate Coal Volume | 194 | 8.5 |

Aggregate coal volumes (where applicable) are based on 2014 non-binding nominations provided by producers in September 2012.

[5] ACCC Decision in relation to ARTC's Hunter Valley Rail Network Access Undertaking – Initial Indicative Service variation, 17 October 2012

## 3. 2014 Forecasts Costs

**Table 3**

| $m | Pricing Zone 3 |
|---|---|
| Variable Maintenance | 8.8 |
| Fixed Maintenance | 11.1 |
| Non-Segment Specific Costs | 11.8 |
| **Full Economic Cost** | 129.7 |
| **Average Asset Base** | 666.5 |

## 4. 2014 Forecast RAB Floor Limit

**Table 5**

| $m | Pricing Zone 3 | | |
|---|---|---|---|
| | 2013 – Opening | 2014 - Opening | 2014 - Closing |
| RAB Floor Limit | 276.4* | 647.6 | 685.3 |

*RAB Floor Limit excludes Gap to Turrawan DORC value as at 1 January 2013
Assumes 2012 RAB Floor Limit closing value proposed in 2012 Annual Compliance Assessment

## 5. Pricing Considerations

ARTC has incorporated a number of considerations in developing 2014 IIAC and 2014 IAC for Pricing Zone 3. These considerations are consistent with the development of the 2013 IIAC and are described below.

Pricing Principles under the Varied 2011 HVAU permit some flexibility in developing the 2014 IIAC and 2014 IAC for Pricing Zone 3. Relevant considerations in this regard are as follows.

- 2014 IIAC and 2014 IAC for Pricing Zone 3 are structured as a non-TOP component and a TOP component.
- Both the non-TOP component and the TOP component of 2014 IIAC and 2014 IAC for Pricing Zone 3 are based on modelled GTK arising from forecast coal volumes. The actual revenue from the non-TOP component during 2014 will vary with actual GTK and the TOP component is fixed, based on the forecast (and ultimately contracted) GTK.
- 2014 IIAC and 2014 IAC are specified for the Initial Indicative Service and Interim Service for Pricing Zone 3 as prescribed in the varied 2011 HVAU
- The variable component of costs (VCC) being Direct Costs are sought to be recovered through the non-TOP component of the 2014 IIAC and 2014 IAC for Pricing Zone 3.

- The TOP component of 2014 IIAC and 2014 IAC should aim to recover all of NCC and some or all of FCC.
- Outside of differentiation considerations, the proportion of FCC recovered through the TOP component of 2014 IIAC and 2014 IAC for Pricing Zone 3 should be applied consistently to all Access Holders holding Coal Access Rights in Pricing Zone 3.
- Differentiation between 2014 IIAC, 2014 IAC and 2014 Charges for Non-Indicative Services should have regard to the range of factors specified in Sections 4.15 and 4.16 of the Varied 2011 HVAU, and the 17 October 2012 ACCC Decision.

Following consideration of all of the above, the forecast 2014 IIAC and 2014 IAC for Pricing Zone 3 have the following characteristics:

- These Charges have been proposed for the relevant Initial Indicative Service prescribed in the table at section 4.17(d) of the Varied 2011 HVAU and the relevant Interim Service prescribed in the table at section 4.19(c) of the Varied 2011 HVAU respectively.
- These Charges result in revenue that is less than the Ceiling Limit at Section 4.3 of the Varied 2011 HVAU, subject to the volume and cost forecasts described in this paper. Specifically, if the 2014 IIAC and 2014 IAC were applied to all traffic operated in Pricing Zone 3 the resulting revenue would not exceed the Economic Cost of the Network.
- The non-TOP component of the 2014 IIAC and 2014 IAC is aligned to VCC. In other words, ARTC has not sought to recover any part of FCC through the non-TOP component of the 2014 IIAC and 2014 IAC for Pricing Zone 3. This is consistent with the Pricing Objectives at section 4.13(b) of the Varied 2011 HVAU. The proportion of the 2014 IIAC and 2014 IAC represented by the non-TOP component is X% and Y% respectively.
- Both the non-TOP component and TOP component of the 2014 IIAC and 2014 IAC for Pricing Zone 3 have been differentiated on the basis of the impact on maintenance, Capacity and Coal Chain Capacity of different service configurations in accordance with the Varied 2011 HVAU, and the 17 October 2012 ACCC Decision.
- Outside of the differentiation considerations, and consistent with section 4.13(b)(iv) of the Varied 2011 HVAU, the proportion of FCC recovered through the TOP component of 2014 IIAC and 2014 IAC is consistently applied to all Access Holders holding Coal Access Rights in Pricing Zone 3.
- Consistent with section 4.16(b) of the Varied 2011 HVAU, the 2014 IIAC and 2014 IAC for Pricing Zone 3 satisfy the limits on pricing differentiation.

## 6. 2014 – 2023 Forecast Information

The following forecast information is provided for Pricing Zone 3.

**Table 6**

| Forecast annual ($m nominal) | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total operating expenditure | 31.7 | 39.6 | 56.3 | 61.4 | 53.9 | 45.3 | 40.3 | 37.7 | 39.1 | 47.4 |
| Capital expenditure | 59.0 | 140.0 | 74.9 | 296.2 | 187.3 | 16.6 | 17.2 | 12.4 | 11.5 | 18.7 |

Assumptions underpinning the 10 year forecast include:

- All producers that have submitted non-binding volume nominations will enter into an Access Holder Agreement (AHA) consistent with those nominations.
- All producers will continue to operate under an access holder agreement in a form consistent with the Indicative Access Holder Agreement under the Varied 2011 HVAU.
- The capital expenditure program built into the forecast reflects a slowed program to deliver the reduced volume forecasts and includes Congestion Projects.
- Maintenance costs and minor capital works reflect ARTC's most current estimates of expected future expenditure.
- Inflation for years beyond 2014 is assumed to be 2.5%.