

Aurizon Network Access Undertaking (2010)

Proposed New Reference Tariff

Train Services to Wiggins Island Coal Export Terminal



Table of Contents

1	BACKGROUND	3
1.1	PURPOSE	3
1.2	SUMMARY OF PROPOSAL	3
1.3	INTRODUCTION	6
1.4	HISTORICAL CONTEXT	9
1.5	OPERATIONAL BENEFITS	10
2	AURIZON NETWORK'S ACCESS UNDERTAKING	11
2.1	APPLICABLE ACCESS UNDERTAKING	11
2.2	2010 ACCESS UNDERTAKING: PART 6 PROVISIONS	12
2.3	2010 ACCESS UNDERTAKING: SCHEDULE F	13
2.4	WIRP ACCESS CONDITIONS	14
3	MAXIMUM ALLOWABLE REVENUE	16
3.1	PRIVATE INCREMENTAL COSTS	16
3.2	INCREMENTAL COSTS	16
3.2.1	INCREMENTAL CAPITAL COSTS	16
3.2.2	PRE-APPROVAL OF CAPITAL PROJECT SCOPE	18
3.2.3	ALLOCATION OF CAPITAL COSTS	19
3.2.4	INCREMENTAL MAINTENANCE AND OPERATING COSTS	21
3.3	MINIMUM CCC	23
3.3.1	ALTERNATIVE WIRP_MOURA MINIMUM CCC PROPOSAL	24
3.3.2	MINIMUM CCC FOR WIRP_NCL TRAIN SERVICES	25
3.3.3	SUMMARY OF MINIMUM CCC	26
3.4	REVENUE DEFERRAL	26
3.5	SUMMARY OF SMOOTHED MAR REQUIREMENT FOR WIRP TRAIN SERVICES	27
4	VOLUME FORECASTS	28
4.1	AURIZON NETWORK'S APRIL-13 FORECAST	28
4.2	QCA DRAFT DECISION – ENERGY ECONOMICS FORECAST	29
4.3	PROPOSED INDEPENDENT VOLUME FORECAST	31
5	PROPOSED REFERENCE TARIFFS	34
5.1	APPLICATION OF SUBCLAUSE 4.1.2	34
5.2	REFERENCE TRAIN	34
5.3	PROPOSED REFERENCE TARIFFS	35
5.4	CUSTOMER IMPACT	37
6	GLOSSARY	39

1 Background

1.1 Purpose

This submission seeks the Queensland Competition Authority's (QCA) approval for new 'transitional' Reference Tariffs for the Blackwater and Moura Systems to take into account additional revenues and volumes arising from the Wiggins Island Rail Project (WIRP).

Consultation

In preparing this submission, Aurizon Network has consulted WIRP Customers, who comprise:

- Existing Blackwater and Moura system end customers who have contracted additional below-rail capacity for access to the Wiggins Island Coal Export Terminal (WICET); and
- New Blackwater system end customers and end customers originating from the Queensland Rail network, who have contracted new below-rail capacity for access to WICET.

The consultation process resulted in Aurizon Network obtaining an up-to-date, independent volume forecast, and verification of historical events relating to the development of WIRP.

1.2 Summary of Proposal

Proposed Reference Tariffs

The Reference Tariffs proposed for WIRP and non-WIRP Train Services are outlined in the tables below. The proposed Reference Tariffs are 'transitional' as the final Reference Tariffs associated with the 2014 Draft Access Undertaking (2014DAU) period are yet to be approved.

Blackwater System Reference Tariffs	FY2015[^]	FY2016	FY2017
AT ₁ (\$ / '000 gtk)	0.88	0.90	0.93
AT ₂ (\$ / tp)	2,069.85	2,121.60	2,174.64
AT ₃ (\$ / '000 ntk)	4.84	6.04	5.99
AT ₄ (\$ / nt)	1.60	2.08	2.07
AT ₅ (\$ / '000 egtk)	4.04	3.27	3.11

Table 1: Proposed Reference Tariffs: Blackwater System. Applicable to WIRP and non-WIRP Train Services.

Moura System Reference Tariffs	FY2015[^]	FY2016	FY2017
AT ₁ (\$ / '000 gtk)	1.64	1.68	1.72
AT ₂ (\$ / tp)	620.00	635.50	651.38
AT ₃ (\$ / '000 ntk)	8.24	7.39	7.18
AT ₄ (\$ / nt)	1.35	1.21	1.18
AT ₅ (\$ / '000 egtk)	--	--	--

Table 2: Proposed Reference Tariffs: Moura System. Applicable to non-WIRP Train Services.

WIRP_Moura System Premium	FY2015 [^]	FY2016	FY2017
AT ₃ (\$ / '000 ntk)	--	6.36	7.27

Table 3: Proposed Reference Tariffs: Moura System. Applicable to WIRP_Moura Train Services

WIRP_NCL Reference Tariffs	FY2015 [^]	FY2016	FY2017
AT ₁ (\$ / '000 gtk)	N/A	1.68	1.72
AT ₂ (\$ / tp)	N/A	1,872.86	1,879.39
AT ₃ (\$ / '000 ntk)	N/A	--	--
AT ₄ (\$ / nt)	N/A	--	--
AT ₅ (\$ / '000 egtk)	N/A	--	--

Table 4: Proposed Alternative Reference Tariff: Applicable to WIRP_NCL Train Services

[^] FY2015 rates are consistent with the current published transitional tariffs¹, including the FY2013 Revenue Cap adjustments and excluding Aurizon Network's proposed Flood Recovery adjustment.

Average Blackwater Access Charge (\$ per NT, nominal)	FY2016	FY2017
Blackwater System (pre-WIRP)	6.98	6.98
WIRP_Blackwater (incremental + CCC)	6.23	6.42
WIRP and non-WIRP Socialised	6.60	6.61

Table 5: Average Blackwater Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

Average Moura Access Charge (\$ per NT, nominal)	FY2016	FY2017
Moura System (pre-WIRP)	3.10	3.05
Moura System (post-WIRP)	3.06	3.00
WIRP_Moura (incremental)	4.54	4.65

Table 6: Average Moura Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

Average WIRP_NCL Access Charge (\$ per NT, nominal)	FY2016	FY2017
WIRP_NCL (incremental)	1.52	1.53

Table 7: Average Moura Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

Implementation - Financial Year 2015

WIRP Train Services are expected to commence first railings in Quarter 4 of Financial Year (FY) 2015. Given the uncertain timing of a Final Decision on this WIRP Pricing Proposal, Aurizon Network proposes that WIRP Train Services will pay the existing transitional Reference Tariff² of the Blackwater or Moura

¹ Approved by the QCA on 12 June 2014.

² Ibid

System. These Reference Tariffs are presented in the tables above, inclusive of the FY2013 Revenue Cap adjustment but exclusive of Aurizon Network's proposed Flood Recovery adjustment.³ Aurizon Network proposes that WIRP Train Services will also contribute towards the Flood Recovery adjustment if approved by the QCA.

Aurizon Network also proposes that access revenues and volumes associated with WIRP Train Services operated during FY2015 will be quarantined from the Blackwater or Moura System Allowable Revenues (revenue cap) including Take or Pay (ToP) system tests. QCA endorsement of this proposal is required as the relevant Standard Access Agreement requires that Take or Pay will be payable if the relevant system 'trigger test' is met. For FY2015, Aurizon Network is seeking to waive this requirement for WIRP Train Services and to not adjust the System Allowable Revenues (and therefore the Take or Pay system cap) for other Train Services in Blackwater and Moura.

Any access revenues received from WIRP Train Services in FY2015 will instead be credited against WIRP allowable revenues, which are added to Blackwater and Moura System Allowable Revenues from FY2016 onwards.

Implementation - Financial Years 2016 and 2017

Aurizon Network proposes to develop new Reference Tariffs, System Allowable Revenues and System Forecasts inclusive of WIRP Train Services from FY2016; the year in which all WIRP related projects will be completed. These matters have not yet been confirmed for FY2016 and FY2017 as the QCA has not released its Draft Decision on Pricing and Policy for the 2014DAU period. As a result, Aurizon Network has escalated the FY2015 transitional AT₁ and AT₂ Reference Tariffs⁴ at a forecast Consumer Price Index (CPI) of 2.5%. The AT₃, AT₄ and AT₅ Reference Tariffs have been calculated to reflect the requirements of Subclause 4.1.2 of the 2010 Access Undertaking (2010AU).

Any variance between the transitional Reference Tariffs approved as part of this submission and the Reference Tariffs associated with finalisation of the 2014DAU process will be recovered from, or returned to the relevant Access Holders via an Adjustment Charge.

Basis of Preparation

Aurizon Network has prepared this submission in accordance with its obligations to develop Reference Tariffs under the pricing principles contained in Part 6 and specifically Clause 6.4 of the 2010AU. The relevant methodology and underlying assumptions used in the development of Reference Tariffs are detailed in this submission and consistent with Schedule F of the 2010AU.

Clause 3.3.1(a)(i) of the 2010AU, states that any assessment as to the prudence of the investment should be based on the facts reasonably known to the parties at the time of making the decision. During the period of the 2010AU, Aurizon Network:

- contracted capacity for WIRP Train Services;
- commenced construction of all projects included in the WIRP programme; and
- conducted detailed financial analysis as to the expected regulatory revenue and pricing outcomes on the basis of the Pricing Principles outlined in the 2010AU.

In light of the above, and given the fact that the QCA's Draft Decision on Policy and Pricing for the 2014DAU has not yet been published by the QCA, Aurizon Network considers it appropriate to calculate

³ Submitted to the QCA on 6 November 2014.

⁴ Approved by the QCA on 12 June 2014.

Reference Tariffs for WIRP Train Services with reference to the provisions of the 2010AU; the applicable undertaking at the time the decision to invest was made, and is currently in force.

When preparing the financial model in support of this submission, Aurizon Network has relied upon information contained within the QCA's Draft Decision on Maximum Allowable Revenue (MAR), published in September 2014 (Draft Decision). This includes (but is not limited to) draft decisions with respect to WACC, depreciation, maintenance and operating cost allowances. The use of this information is not intended to reflect Aurizon Network's acceptance (or rejection) of the QCA's draft decisions, however, Aurizon Network considers it appropriate to conduct the analysis on the basis of financial assumptions that all stakeholders are familiar with. Aurizon Network notes that the analysis within this submission may have to be updated to reflect the final parameters confirmed as part of the 2014DAU process.

In addition to the parameters contained within the Draft Decision, Aurizon Network has:

- updated the Capital Expenditure forecasts to reflect cost savings associated with WIRP related projects. Aurizon Network will submit these updated capital costs as part of its response to the QCA's MAR Draft Decision, due December 2014; and
- relied upon an independent volume forecast report, which was commissioned from John T. Boyd Company (JT Boyd) by WICET. This report has been provided to Aurizon Network in confidence. Aurizon Network has been advised that WICET has submitted this JT Boyd report directly to the QCA.

1.3 Introduction

Wiggins Island Coal Export Terminal

WICET is a major infrastructure project involving the construction of a new coal export terminal that will become an integral part of the existing infrastructure at the Port of Gladstone. Built in stages to match forecasted coal export demand, the privately funded terminal aims to deliver 27 million tonnes per annum (mtpa) of new export capacity with the completion of the first stage expected in March 2015.⁵ As part of its longer term growth plans, WICET expects to expand to a total of 120 million tonnes per annum of export capacity.⁶

Wiggins Island Rail Project

WIRP will create a vital rail link between mines in the southern Bowen Basin and WICET. WIRP refers to a series of individual rail infrastructure projects, which are geographically distinct and have been managed as separate sub-projects of the wider WIRP programme.

First Stage

The first stage of WIRP involves the construction of new infrastructure and upgrades to existing coal rail infrastructure in the Blackwater and Moura systems. WIRP will support WICET's initial development of 27 million tonnes as well as improve the operational performance of the Blackwater and Moura systems, providing a benefit to all users.

⁵ www.wicet.com.au/index.php?id=13

⁶ www.wicet.com.au/irm/content/company-overview.aspx?RID=317&RedirectCount=1

A description of these segments is outlined below:

Project Segment	Description
Moura System Upgrades	Replacement and upgrading of existing rail formation and track in the Moura system to increase the robustness of the network. Upgrades to rail/road crossings to improve safety.
WICET Balloon Loop	Construction of a single electrified rail spur and balloon loop near Yarwun to enable unloading of coal at WICET. Replacement of major components of the Callemondah Feeder Station to support the ongoing use of electric train services in and around the Gladstone region.
Bauhinia North Upgrades	Construction of a new passing loop, and upgrades to existing Rail Infrastructure.
North Coast Line Upgrades	Triplication of the North Coast Line at Yarwun. Construction of two new holding roads at Kabra and one at Aldoga to facilitate the efficient staging of trains into the Gladstone region. Upgrades to the Yarwun ballast siding to permit ongoing operational efficiencies. Upgrades to rail/road crossings to improve safety.
Blackwater Duplications	Duplication of 18km of track between Rocklands and Stanwell and 24km of track between Dingo and Bluff. Upgrades to existing infrastructure to increase the robustness of the network. Rationalisation and optimisation of rail/road crossing to improve safety.

Table 8: Description of project segments

The location and completion dates of each project are outlined in figure 1 and table 6 below.

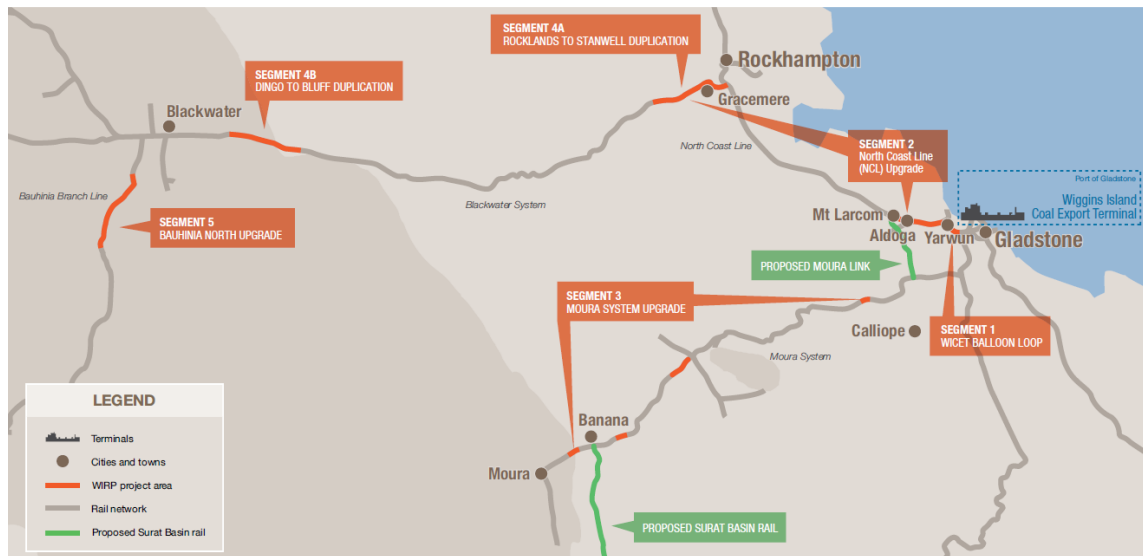


Figure 1: Location of WIRP related projects

Project Segment	Estimated year of Final Commissioning	Estimated month of Final Commissioning ⁷
Moura System Upgrades	FY2014 & FY2015	August-13 (a) / March-15 (e)
WICET Balloon Loop ⁸	FY2015	February-15 (e)
Bauhinia North Upgrades ⁹	FY2015	November-14 (a)
North Coast Line Upgrades	FY2016	October-15 (e)
Blackwater Duplications ¹⁰	FY2016	July-15 (e)

Table 9: Estimated operational commissioning of WIRP related projects

With the exception of the WICET Balloon Loop and portion of the Moura West upgrades, projects included in the WIRP programme are fully integrated with the existing mainline infrastructure of the Blackwater and Moura systems. The Blackwater Duplications, Moura East, NCL and Bauhinia North upgrades will be utilised by both WIRP and non-WIRP customers. Approximately 94% of the capital value of WIRP relates to multi-user infrastructure. Furthermore, over 70% of the capital value of WIRP infrastructure will be utilised by non-WIRP customers in the Blackwater and Moura systems.

The Blackwater Duplication projects were deemed to be prudent and accepted by incumbent Blackwater system customers as part of the 2008 Coal Rail Infrastructure Master Plan (CRIMP). As part of this CRIMP process, the Blackwater Duplications also received scope pre-approval from the QCA¹¹. These approvals were granted in the absence of any additional contracted capacity specifically as a result of WIRP¹², and in the context that the robustness and reliability of the network would be greatly enhanced. The completion of these duplications will deliver considerable operational efficiencies to both new and existing Access Holders in the supply chain.

Aurizon Network considers the full capital cost of the Blackwater Duplications should not be treated as Incremental Costs as per the 2010AU¹³, i.e. some or all of the duplications were still desirable in the absence of committed WIRP Train Services. Therefore, the full cost of these duplications should not be deemed as costs that are incremental to WIRP Train Services. It should also be noted that there are a number of non-capital related capacity enhancements being instituted as part of the WIRP programme, e.g. 50% increase to pathing on the Blackwater systems as a result of reducing train headways from 30 minutes to 20 minutes – creating an additional 722 paths per month. As a result, Aurizon Network proposes to allocate a portion of these costs between WIRP and non-WIRP users for the purpose of assessing WIRP Train Services against the requirements of Schedule F of the 2010AU. This will be discussed in further detail below.

⁷ (a) denotes 'actual' completion date; (e) denotes 'expected' completion date.

⁸ Majority of track construction works completed in May 2014 and rail works required for first coal shipments will be commissioned progressively to align with the expected commencement of WIRP operations by end of March 2015.

⁹ Majority of track construction works completed in May 2014. Passing loop is expected to be commissioned in line with WICET and customer operations.

¹⁰ Refers to the duplication of seven single line sections in the Blackwater system.

¹¹ Brian Parmenter, Chairperson QCA, letter to Lance Hockridge, 23 April 2009. QCA File Ref: 254640.

¹² Coal export terminal projects were also being considered at RG Tanna (Gladstone) and at Port Alma (between Gladstone and Rockhampton).

¹³ QR Network's 2010 Access Undertaking, pg. 141

1.4 Historical Context

Aurizon Network commenced discussions with proponents for WICET as early as 2008. At that point in time, WICET was being developed by Gladstone Ports Corporation, however, Aurizon Network's engagement continued as development transitioned to the current developer, i.e. the Wiggins Island Coal Export Terminal Pty Ltd (a company owned by the WIRP customers).

As the development of WICET progressed, in April 2010 Aurizon Network engaged with end customers (miners) who were seeking capacity at the proposed port and therefore required access to rail capacity in the Central Queensland Coal Region (CQCR). The culmination of these discussions were the WIRP arrangements, which were executed in September 2011.

Notwithstanding these discussions and concurrent with them, in December 2010 the Gladstone Coal Exporters Executive (GCEE) wrote to Aurizon Network¹⁴, requesting that it:

"...recommence the duplication programme for the remaining single line sections of the rail line between Rocklands and Blackwater, as a matter of utmost urgency and continue that programme in a structured manner, until all duplications are complete."

This request from the GCEE occurred in the absence of any committed capacity on the Blackwater system associated with WIRP Train Services; indicating a strong view that the duplications were prudent in the absence of such commitment and that the investment should be funded under a socialised pricing arrangement consistent with the pricing principles in the 2010AU.

WIRP customers were aware that the Blackwater Duplications had received regulatory pre-approval from the QCA and of the approaches by the GCEE with respect to the duplication programme.

More recently, in November 2014¹⁵ the Capricornia Coal Chain Steering Committee (CCCSC), which is made up of incumbent Blackwater customers, supported the acceleration of the completion timeframes for the delivery of the Blackwater Duplications on the basis that:

- Day of operation losses will be minimised by early availability of duplicated track allowing for more optionality for recovery; and
- Reduced pathing separation:
 - From 30 mins to 20 mins (moving from 48 paths per day to 72 paths per day) in the case of the Blackwater network; and
 - From 30 mins to 15 mins (moving from 48 paths per day to 96 paths per day) in the case of the North Coast Line.

Consistent with Clause 3.3.1 (a)(i) of the 2010AU, Aurizon Network considers that any assessment as to the prudence of the investment (especially with respect to the Blackwater Duplications) should be based on the facts reasonably known to the parties at the time of making the decision to proceed with the investment.

¹⁴ GCEE, letter to Lance Hockridge, 14 December 2010.

¹⁵ Network Supply Chain Briefing, 9 November 2014.

During the period of the 2010AU¹⁶, Aurizon Network conducted detailed financial analysis with respect to the expected regulatory revenue and pricing outcomes. This analysis was conducted with reference to the requirements of the 2010AU, specifically those outlined in Part 6 and Schedule F.

In view of the above, Aurizon Network believes that the pricing principles set out in Part 6 and Schedule F of the 2010AU should be used as the basis for pricing for WIRP Train Services, rather than the principles set out in Part 6 and Schedule F of the 2014DAU, on the basis that the Blackwater Duplications were endorsed under the UT2 pricing principles which are consistent with the 2010AU.

1.5 Operational Benefits

The completion of the WIRP programme will provide tangible benefits to both WIRP and non-WIRP volumes operating within the Blackwater and Moura systems. The upgrades will increase the number of available train paths (from 48 to 72 paths per day in the Blackwater system, and from 48 to 96 paths per day on the North Coast Line), resulting in significantly greater planning flexibility, fewer contested paths, and a greater ability to recover from day of operations losses and maintenance activities. The additional track duplications in the Blackwater system will allow Network maintenance to occur while still allowing trains to be scheduled on the duplicate section (single line closures). This will mean greater optionality and will minimise the number of whole system closures. It is expected that upgrades to the Kabra holding roads will also allow operators the opportunity to better align paths on the North Coast Line and to improve alignment for train crews.

In addition to the above, the older signalling equipment which is currently in place in the Blackwater system and on the North Coast Line has contributed to increases in two measured events, namely: Restored In Face of Train (RIFOT) and Restored and Passed at Danger (RAPAD). These events are triggered when safety systems within the signalling installation determines an unexpected event (such as a fault), which then prompts the system to determine that the route ahead is potentially unsafe. While this reflects a heightened level of risk management by the system, both of these events are undesirable from a train handling perspective as the train driver is forced to stop due to an unexpected change to the Signalling controls. This can contribute to train delays and ultimately a loss of capacity. The WIRP programme includes the renewal of signalling equipment in the Blackwater system and on the North Coast Line, which will improve signalling reliability in the CQCN.

The North Coast Line Upgrades will contribute to improved signalling outcomes as it will provide uninterrupted power supply improvements at Aldoga, Mt Larcom and Mt Miller. The upgrades will replace track circuits at these sites with axle counters, as a study of axle counters against track circuit technology determined this as the best solution to replace aging track circuits.¹⁷ These upgrades are expected to improve the robustness and reliability of infrastructure in the Gladstone area, thereby easing congestion. This will benefit Blackwater and Moura customers.

Non-WIRP customers operating within the Moura system are also expected to benefit from the WIRP programme, specifically, the Moura East and North Coast Line upgrades. The Moura East project scope included rail replacement, renewals and strengthening in the Moura system, which has contributed to a reduction of speed restrictions and track failures, which together have contributed to historical capacity losses. These works are expected to contribute to reductions in maintenance activities and costs in the Moura system.

¹⁶ 1 July 2009 to 30 June 2013.

¹⁷ Aurizon Network Customer Briefing, Improvements in Signalling Reliability, 21 November 2014.

2 Aurizon Network's Access Undertaking

2.1 Applicable Access Undertaking

Aurizon Network has prepared this submission in accordance with the 2010AU, rather than the 2014DAU which is currently under consideration by the QCA.

Aurizon Network confirms that the submission may result in a different pricing outcome (for example, an expansion tariff) under the 2010DAU. However, since the 2014DAU was not in place at the time the investment decision was made, and has not been approved it would not be appropriate to use either the proposed 2014DAU or the QCA's Draft Decision on Pricing and Policy on the 2014DAU¹⁸ (which is yet to be published) to determine the Reference Tariffs.

Furthermore, investors and developers of all WICET and WIRP related infrastructure including the port, rail and mine investments relied on existing regulatory practice. Clause 3.3.1(a)(i) of the 2010AU, states that any assessment as to the prudence of the investment should be based on the facts reasonably known to the parties at the time of making the decision. During the period of the 2010AU, Aurizon Network:

- contracted capacity for WIRP Train Services;
- commenced construction of all projects included in the WIRP programme¹⁹; and
- conducted detailed financial analysis as to the expected regulatory revenue and pricing outcomes on the basis of the pricing principles outlined in the 2010AU, with end customers and Aurizon Network making investment decisions on this basis.

In light of the above, Aurizon Network considers it appropriate to calculate Reference Tariffs for WIRP Train Services with reference to the provisions of the 2010AU.

Aurizon Network notes that some parallels may be drawn between this proposal and Aurizon Network's Draft Amending Access Undertaking (DAAU) for Train Services using the Goonyella to Abbot Point Expansion (GAPE) system. However, there are a number of key differences which lend support to a different approach for the WIRP proposal:

- The pricing principles were consistent between UT2 (when the project was endorsed) and UT3 (when the DAAU was approved).
- As part of negotiations concurrent with scope pre-approval, it was agreed that:
 - Newlands users would only share costs linked to benefits²⁰ arising from the GAPE project and that the balance of costs would be covered under a separate expansion tariff; and
 - Separate revenue and Take or Pay system caps would apply (resulting in a separate system – the GAPE system – being established).

¹⁸ This is consistent with QCA practice – for example the QCA rejected Aurizon Network's transitional tariffs on the basis they included unapproved revenue for the 2013 Flood Claim.

¹⁹ The WIRP programme commenced in November 2011 and is currently 70% complete. By 1 July 2015, the programme is estimated to be 96% complete.

²⁰ Benefits included asset replacement/renewals in the Newlands system, which were required regardless of whether the GAPE project went ahead or not. This allocation of GAPE Project costs were approved by the QCA as part of the UT3 Capital Indicator.

2.2 2010 Access Undertaking: Part 6 Provisions

Part 6 of the 2010AU sets out the pricing principles for developing and setting Access Charges and Reference Tariffs. Aurizon Network is obliged to apply the pricing principles as per Part 6 and if needed apply the principles in the following order in the case of conflict:

Principle	Summary	Relevance to WIRP
Limits on Price Differentiation (6.1.2)	Aurizon Network cannot differentiate Access Charges between Access Seekers and Access Holders unless there is a difference in cost or risk in providing the service.	Price differentiation between WIRP Customers is limited to geographical and operational differences, e.g. whether mines are located in the Blackwater or Moura system, the length of haul and volumes railed.
Pricing Limits: Application (6.2.1)	Upper and lower price limits for Train Services are established to ensure that no Cross Subsidy occurs between Train Services but Aurizon Network may vary (subject to QCA approval) Reference Tariffs inconsistent with the Pricing Limits to promote efficient investment.	Aurizon Network is confident that no Cross Subsidy will occur because Access Charges for WIRP Train Services will be set with reference to an independent volume forecast to recover Incremental Costs plus a minimum Contribution to Common Costs.
Pricing Limits: Individual Train Services (6.2.2)	Price limits apply to establishing Access Charges for a Train Service over the Evaluation Period that will not: <ul style="list-style-type: none"> (1) Fall below the expected Incremental Cost for providing Access to that Train Services; or (2) Exceed the expected Stand Alone Costs of providing Access for that service. 	<p>Aurizon Network has calculated an Access Charge, which will sit between these pricing limits.</p> <p>The 'floor' Access Charge, will be based on an assessment of the Incremental Costs of WIRP Train Services. WIRP Train Services are required to also make a Contribution towards the Common Costs of the relevant coal system.</p> <p>The resulting Access Charge will be lower than the Stand Alone Cost, which would see WIRP Train Services paying an Access Charge for the full system, as if they were the only Train Services utilising the infrastructure.</p>
Rail Infrastructure Utilisation (6.3.1)	Aurizon Network is allowed to set different Access Charges for Access Holders servicing different markets.	Not currently relevant to coal traffic.
Revenue Adequacy (6.3.2)	If AN complies with the pricing constraints in 6.1.2 and 6.2 then Aurizon Network is entitled to earn revenue from the provision of Access sufficient to achieve full recovery of Efficient Costs	The Maximum Allowable Revenue used to determine Access Charges for WIRP Train Services will be based on inputs that the QCA deems to be prudent and efficient.

Table 10: Summary of Pricing Principles outlined in Part 6 of the 2010 Access Undertaking

Process for Setting Reference Tariffs

Part 6, subclause 6.4.2 (b) requires that where a coal mine is developed which utilises Rail Infrastructure in the CQCR, the Train Services associated with that mine will be incorporated in a new or existing Reference Tariff in a manner consistent with Schedule F.

Draft Amending Access Undertaking not required

Subclause 6.4.2 provides a mechanism whereby Aurizon Network can submit a new Reference Tariff to the QCA for approval without the need for a DAAU process. Under this clause, Aurizon Network can submit, or the QCA can require Aurizon Network to submit, a new Reference Tariff and corresponding variations to System Allowable Revenue and System Forecasts, which would then be assessed in accordance with the provisions of this clause.

Aurizon Network has prepared this submission following discussions with WIRP customers during which concerns were raised about the volume forecasts proposed by the QCA for WIRP Train Services, and the resulting uncertainty this created for WIRP pricing arrangements. WIRP customers also believe that the pricing principles as per the 2010AU should apply to WIRP Train Services, rather than those outlined in the 2014DAU. Aurizon Network agrees with this approach and acknowledges the invitation from the QCA to submit a comprehensive Reference Tariff proposal for WIRP Train Services²¹.

2.3 2010 Access Undertaking: Schedule F

Schedule F of the 2010AU contains the Reference Tariffs applicable to nominated coal carrying Train Services. These Reference Tariffs have been developed in accordance with the principles contained in Part 6 of the 2010AU.

For the establishment of Reference Tariffs for new coal carrying Train Services, Subclause 4.1.2 of Schedule F (2010AU), Part B. specifies that:

“...the Reference Tariff applicable for a new coal carrying Train Service will be the higher of (on a \$ / net tonne kilometre (ntk) basis):

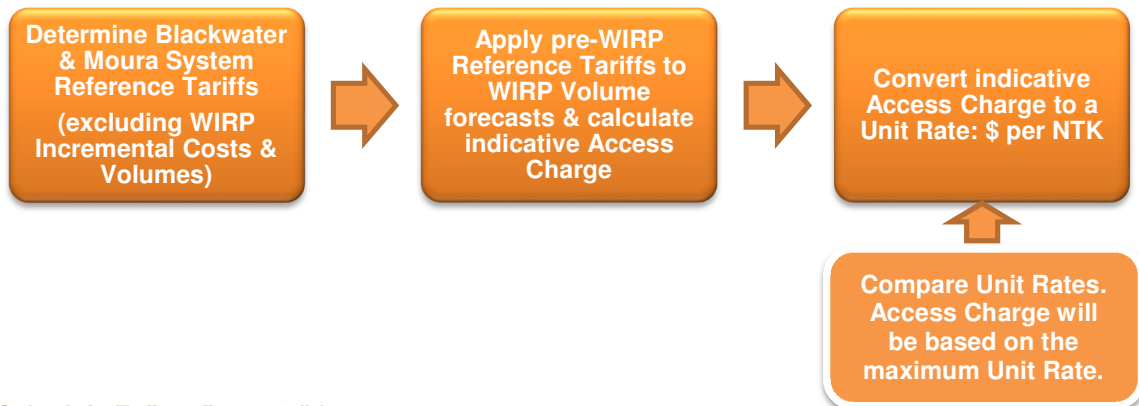
- a) the Reference Tariff for the relevant Individual Coal System Infrastructure; or*
- b) the sum of the new coal carrying Train’s Service’s Private Incremental Costs (if any), the Incremental Costs of using any Rail Infrastructure specifically related to the new coal carrying Train Service and the required minimum Common Cost contribution determined in accordance with Subclause 4.1.1,*

provided that the Access Charge payable to QR Network for the operation of that new coal carrying Train Service is calculated as the applicable Reference Tariff less the Private Incremental Costs...”

This process is represented in figure 2 below:

²¹ QCA letter to Alex Kummant, 26 November 2014.

Schedule F; Part B, 4.1.2 (a)



Schedule F; Part B, 4.1.2 (b)

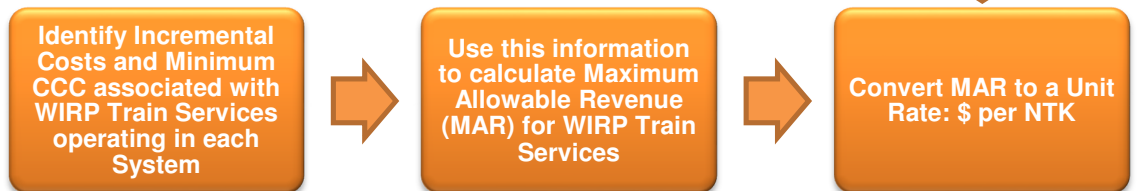


Figure 2: Representation of Schedule F, Part B, Subclause 4.1.2; 2010 Access Undertaking.

The application of these provisions with respect to WIRP Train Services and the relevant inputs will be outlined below.

2.4 WIRP Access Conditions

Clause 6.5.2 of the 2010AU provides Aurizon Network with the ability to seek Access Conditions for Significant Investments (i.e. investments that exceed \$300 million) to mitigate its exposure to financial risks associated with providing access rights for the Access Seeker's train services.

As outlined in Clause 6.5.4 (a), Aurizon Network must provide an Access Conditions report to relevant parties and the QCA, which outlines (among other things):

- (i) the Access Conditions Aurizon Network is seeking;
- (ii) the additional risks Aurizon Network is exposed to which it is seeking to mitigate through the Access Conditions; and
- (iii) why Aurizon Network's exposure to the additional risks would not be reasonably mitigated by existing arrangements (i.e. in the access agreement or the undertaking) or better managed by insurance or other financial instruments.

In May 2011, Aurizon Network submitted a WIRP Access Conditions Report²² to the QCA, which was published for consultation with relevant industry stakeholders. This was followed by a 'final' Access Conditions submission in September 2011.

²² Aurizon Network, Access Conditions Report for the Proposed Wiggins Island Rail Project (WIRP), 11 May 2011.

Summary of WIRP Access Conditions

Aurizon Network and WIRP customers have agreed to an 'incentive-based' Access Condition. This Access Condition takes the form of a "WIRP fee", which is a monthly payment that WIRP users will make to Aurizon Network in addition to their Access Charges.

As outlined in Aurizon Network's Access Conditions Report submitted to the QCA:

- The proposed Access Conditions only compensate Aurizon Network for risks it has taken **in addition** to those outlined in the standard terms and conditions of the Access Agreement. A detailed discussion of these risks are outlined in the WIRP Access Conditions material published on the QCA's website.
- WIRP Access Conditions are not related to adjusted to cash flows, or a varied WACC, as referred to in clauses 6.5.4(a)(vii)(A) and 6.5.4(a)(vii)(B) of the 2010AU respectively.
- The WIRP Fee itself is an incentive based payment, which is linked to Aurizon Network's "performance in relation to the timing, cost and delivery of the installed capacity."²³
- In certain circumstances, Aurizon Network may not be entitled to any WIRP Fee but will continue to be exposed to those additional risks.

Non-WIRP Stakeholder Concerns

Non-WIRP stakeholders have raised concerns about the possibility that they may be required to pay for the WIRP fee and the costs of the WIRP project more broadly through both Reference Tariffs and potential defaults²⁴.

Risk of WIRP Fee Socialisation

Aurizon Network reiterates that the Access Conditions outlined in the WIRP arrangements are an agreement between Aurizon Network and the WIRP Stage 1 customers. The arrangements do not allow Aurizon Network to pass the WIRP Fee through to other Access Holders.

Risk of paying WIRP costs through Reference Tariffs

The risk of sharing CQCN infrastructure costs between users is an accepted part of the standard regulatory framework. In the context of WIRP, this risk must be kept separate and distinct from any discussion around Access Conditions. This is because the WIRP Fee is an 'incentive-based' payment, which compensates Aurizon Network for risks it has accepted in addition to those faced through the standard Access Agreements. The existence of Access Conditions does not give rise to a situation whereby CQCN infrastructure costs cannot be shared.

QCA Final Decision on WIRP Access Conditions

In May 2012, the QCA published its Final Decision to approve Aurizon Network's proposed Access Conditions for WIRP.²⁵ The QCA explicitly noted that:

"The undertaking separately provides for approval of reference tariffs. While there are no defined rules about sharing of asset costs between users, it is up to QR Network to propose a tariff that appropriately recovers access charges from all users and the Authority has the discretion to approve or reject the application."²⁶

²³ Ibid, pg. 5.

²⁴ Ibid, pg. 10.

²⁵ QCA, Final Decision Access Conditions for the Wiggins Island Rail Project (WIRP), 25 May 2012. QCA File Ref: 447182.

²⁶ Ibid, pg. 11.

3 Maximum Allowable Revenue

In order to comply with Subclause 4.1.2 (Schedule F, 2010AU), it is necessary to determine all costs that are incremental to WIRP Train Services operating in both the Blackwater and Moura systems. These include:

- Private Incremental Costs (capital, operating and maintenance costs associated with Private Infrastructure, or Rail Infrastructure (if applicable));
- Incremental Costs (capital, maintenance and operating costs associated with Blackwater or Moura system Rail Infrastructure); plus
- A minimum Contribution to the Common Costs (CCC) of the Blackwater or Moura system.

This information is then used to calculate a Maximum Allowable Revenue (MAR) requirement for the WIRP Train Services.

3.1 Private Incremental Costs

In assessing the criteria under Subclause 4.1.2, Aurizon Network has relied upon information provided by WIRP customers as to their electric and non-electric Private Incremental Costs. Aurizon Network has been advised that Cockatoo Coal has incurred Private Incremental Costs. These Private Incremental Costs will need to be taken into consideration for the purpose of setting Access Charges for the Train Service between Cockatoo Coal's Baralaba Mine and WICET.

When calculating Reference Tariffs applicable to WIRP Train Services operating in the Blackwater System, the value of Private Incremental Costs for the relevant Train Services is \$Nil.

3.2 Incremental Costs

Incremental Costs are defined in the 2010AU as:

“...those costs of providing Access, including capital (renewal and expansion) costs, that would not be incurred (including the cost of bringing expenditure forward in time) if the particular Train Service or combination of Train Services (as appropriate) did not operate, where those costs are assessed as the Efficient Costs and based on the assets reasonably required for the provision of Access”²⁷

The Incremental Costs associated with WIRP Train Services are discussed below.

3.2.1 Incremental Capital Costs

Where a new Reference Tariff is developed, the capital costs associated with the new Train Service(s) can be recognised as either:

²⁷ QR Network's 2010 Access Undertaking, pg. 141

- an increase in the value of the Regulatory Asset Base (RAB), which is appropriate where final capital costs are known; or
- an increase in the value of the Capital Indicator, which provides a forecast of future capital costs.

At the time of writing this submission, the capital costs associated with some WIRP related projects have not been finalised. In addition, the QCA will not have sufficient time to complete a prudency review (as per the requirements of Schedule A of the 2010AU) for the completed project segments, prior to first railings commencing for WIRP Train Services.

Aurizon Network proposes that the capital costs associated with WIRP related projects be recognised as a Capital Indicator, i.e. that the analysis be conducted on the basis of the most recent forecast of the capital costs expected to be incurred.

The amounts to be reflected in the Capital Indicator are presented inclusive of Interest During Construction (IDC). Consistent with the QCA's Draft Decision on Aurizon Network's MAR²⁸, IDC has been calculated with reference to the Draft Decision Vanilla WACC rate of 7.17%.

These amounts differ for those incorporated into the Capital Indicator that was submitted as part of Aurizon Network's 2013DAU. Aurizon Network considers it appropriate that the Capital Indicator reflects the latest view of capital costs for the WIRP programme. The updated Capital Indicator will be submitted as part of Aurizon Network's Response to the QCA's Draft Decision.

Capital Indicator (\$m)	Including IDC
Wiggins Island Balloon Loop	245.8
Blackwater Duplications	424.8
Bauhinia North Upgrades	17.3
Moura System Upgrades	48.3
North Coast Line Upgrades	209.1
Total	945.3

Table 11: Proposed Capital Indicator – WIRP related projects

For clarity, the proposed new Reference Tariffs for WIRP Train Services will be calculated with respect to the Capital Indicator, inclusive of IDC.

Once the capital costs are finalised, they will be submitted to the QCA for assessment against the requirements of Schedule A of the 2010AU²⁹ as part of Aurizon Network's annual Capital Expenditure submission. Any variance between the Capital Indicator and the approved capital expenditure amounts will be accounted for as part of the Capital Expenditure Carryover Account³⁰. This treatment is consistent with all other projects within the Capital Indicator.

²⁸ QCA, Draft Decision on Aurizon Network's Maximum Allowable Revenue, September 2014.

²⁹ Schedule A: Maintenance of Regulatory Asset Base, QR Network's 2010 Access Undertaking, pg. 159

³⁰ Schedule A, Clause 4, QR Network's 2010 Access Undertaking, pg. 172

3.2.2 Pre-Approval of Capital Project Scope

The 2008 Access Undertaking (2008AU) enabled Aurizon Network (then QR Network) to seek regulatory pre-approval for the scope of projects included in the CRIMP.

In order for a project to be pre-approved, Aurizon Network was required to provide incumbent customers and the QCA with detailed information on the scope, standard and cost of capacity expansion projects, including the additional capacity to be delivered by a project and a consideration of alternative solutions. Customer acceptance was deemed to have been received if at least 60% of the relevant customer group (weighted according to incumbent contracted volumes) accepted the scope of the relevant project. Failure to achieve such (incumbent) customer acceptance however would not have prevented the QCA from otherwise assessing the prudence of scope of the project. These requirements are outlined in further detail in the 2008AU, Schedule FB, clauses 2.2.1 and 2.2.2.

It is important to note that only four of the seven WIRP customers would have been entitled to participate in the 2008 CRIMP process.

Blackwater Duplications

The 2008 CRIMP included the Blackwater Duplications which will be constructed as part of the WIRP programme. In doing so, Aurizon Network has realised 'project management' efficiencies in terms of the ability to better coordinate resources, track closures, construction activities and to avoid the need to conduct multiple engagements with suppliers and local communities.

The duplications below were deemed to be prudent and accepted by incumbent Blackwater system customers in the absence of the additional capacity created by WIRP. As a result, they received scope pre-approval from the QCA³¹ as part of this process. As outlined in the QCA's approval letter³², these projects included:

- *Rocklands – Gracemere and Walton – Bluff duplications;*
- *Full Blackwater System Main Line Duplications Design package;*
- *Blackwater main line duplication of the following four projects:*
 - *Kabra – Gracemere duplication;*
 - *Stanwell – Kabra duplication;*
 - *Dingo – Umolo duplication; and*
 - *Walton – Parnabal – Umolo duplication.*

The completion of these duplications will deliver considerable operational efficiencies to both new and existing Access Holders in the supply chain. These benefits include:

- increased system robustness (ability to cope with adverse incidents and demand variability);
- minimise impact of construction closures due to staging of expansion works;
- greater planning flexibility;
- fewer contested train paths;
- an improved ability to recover from day of operations losses;
- minimise whole system closures as a result of required maintenance activities; and
- improved signalling reliability through the renewal of existing equipment in the Blackwater system and on the North Coast Line.

³¹ Brian Parmenter, Chairperson QCA, letter to Lance Hockridge, 23 April 2009. QCA File Ref: 254640.

³² QCA, Regulatory pre-approval for Coal Master Plan 2008 capacity expansion projects, 26 Feb 2009. QCA File Ref: 247995.

In December 2010, the Gladstone Coal Exporters Executive (GCEE) wrote to Aurizon Network³³, requesting that it;

“...recommence the duplication programme for the remaining single line sections of the rail line between Rocklands and Blackwater, as a matter of utmost urgency and continue that programme in a structured manner, until all duplications are complete.”

As outlined above, the completion timeframes for the delivery of the Blackwater Duplications has recently been accelerated on the basis that:

- Day of operation losses will be minimised by the early availability of duplicated track, allowing for more optionality for recovery; and
- Pathing separation would be reduced:
 - From 30 mins to 20 mins (moving from 48 paths per day to 72 paths per day) in the case of the Blackwater network; and
 - From 30 mins to 15 mins (moving from 48 paths per day to 96 paths per day) in the case of the North Coast Line.³⁴

The Blackwater Duplications are fully integrated with the existing mainline infrastructure of the Blackwater system and will be utilised by both WIRP and non-WIRP customers. In light of the above and the receipt of regulatory pre-approval from the QCA, it would be reasonable to assume that the duplication programme would have continued in the absence of additional WIRP capacity.

As a result, Aurizon Network considers that the full cost of these duplications should not be deemed as costs that are genuinely incremental for the purpose of assessing WIRP Train Services against the requirements of Schedule F of the 2010AU.

3.2.3 Allocation of Capital Costs

With the exception of the Wiggins Island Balloon Loop and the Moura West Upgrades, WIRP related projects are fully integrated with the existing Blackwater and Moura coal systems and will be utilised by both WIRP and non-WIRP customers. As a result, Aurizon Network has calculated capital expenditure allocations, which reflect utilisation of each WIRP related project.

Allocations of costs between WIRP Customers

Aurizon Network proposes that where the capital costs of a WIRP related project are unique to a system or specific customer, the costs of that project will be recovered from that system or customer.

Capital costs associated with ‘common-use’ projects (i.e. utilised by multiple parties) will be allocated between WIRP Customers to reflect a proportional share of the Gross Tonne Kilometres (GTK) contracted under WIRP arrangements. This methodology is consistent with the way in which Aurizon Network allocates ‘system-wide’ capital expenditure as part of its annual capital expenditure submissions and takes both geographical and volume differences between WIRP Customers into consideration.

³³ GCEE, letter to Lance Hockridge, 14 December. 2010.

³⁴ Network Supply Chain Briefing, 9 November, 2014.

Allocation of costs to non-WIRP Customers

As outlined above, the Blackwater Duplications were endorsed by non-WIRP customers, received regulatory pre-approval from the QCA in the absence of committed WIRP capacity and create operational benefits in the Blackwater system. Aurizon Network considers that only a portion of these duplications are incremental to WIRP Train Services. The implication of this approach is that non-WIRP customers would be required to make some contribution towards their capital costs.

Seven Blackwater Duplications are being constructed. In its initial WIRP Pricing Paper³⁵, Aurizon Network proposed a conservative capital allocation to existing Blackwater customers. This amount was equivalent to 1/7th of the total cost of duplications. However, after further consideration, Aurizon Network believes that this allocation materially understates the value that these duplications will create for all customers (WIRP and non-WIRP) in the Blackwater system. Furthermore, when WIRP volumes ramp-up up to full utilisation, they will only comprise approximately 1/3rd of the total tonnes utilising this infrastructure. Non-WIRP volumes will make up the balance.

In light of the information outlined above and the operational benefits realised in the Blackwater and Moura systems to date, Aurizon Network believes that a more balanced cost allocation is reasonable. Aurizon Network proposes to share the costs of Blackwater Duplications evenly between WIRP and non-WIRP customers, i.e. allocate the Blackwater Duplication costs 50 / 50.

Interaction with Schedule F, subclause 4.1.2

To assess WIRP Train Services against the requirements of Subclause 4.1.2, Aurizon Network has allocated the capital expenditure outlined in the table above between different groupings, namely:

- WIRP_Blackwater;
- WIRP_Moura;
- WIRP_NCL; and
- Non-WIRP Blackwater.

Where:

- WIRP_Blackwater refers to customers who have contracted Train Services under WIRP arrangements and are geographically located in the Blackwater system;
- WIRP_Moura refers to a customer who has contracted Train Services under WIRP arrangements and is geographically located in the Moura system;
- WIRP_NCL refers to a customer who has contracted Train Services under WIRP arrangements and is geographically located north of Maryborough; and
- Non-WIRP Blackwater refers to customers geographically located in the Blackwater system, who have not contracted Train Services under WIRP arrangements.

³⁵ Aurizon Network, Wiggins Island Rail Project Proposed Revenue and Pricing Treatment, August 2014. Available at: qca.org.au

The capital allocations to each group for pricing purposes are outlined in the table below. They are separated into Electric and 'Non-Electric' assets, and expressed inclusive of IDC.

Capital Allocation (incl IDC) (\$ million, Nominal)	Non-Electric	Electric	Total
WIRP_Blackwater	603.5	48.8	652.3
WIRP_Moura	79.7	--	79.7
WIRP_NCL	0.9	--	0.9
'non-WIRP' Blackwater	189.0	23.4	212.4
Total	873.2	72.1	945.3

Table 13: Proposed Capital Allocations by Customer Group; including IDC

Given the relatively low amount of electric capital expenditure associated with the WIRP programme, it is expected that the Blackwater AT₅ Reference Tariff will reduce as a direct result electric WIRP Train Services under a socialised pricing outcome.

Aurizon Network uses a 'building block' approach to calculate a 'Return on' and 'Return of' capital for each grouping. These amounts form part of the MAR for WIRP Train Services, and are outlined below.

Incremental Capital Costs (\$ million, Nominal)	FY2016	FY2017
WIRP_Blackwater	61.7	61.7
WIRP_Moura	7.7	7.8
WIRP_NCL	0.1	0.1
Total	69.4	69.7

Table 14: Incremental Capital Costs for WIRP Train Services

Detailed calculations supporting the above capital allocations and building block calculations are contained in the financial model provided concurrently with this submission.

Capital expenditure associated with rail infrastructure required to support future WICET expansions (in excess of 27 million tonnes per annum) has been excluded from this analysis and will be considered in subsequent regulatory periods, as necessary.

3.2.4 Incremental Maintenance and Operating Costs

Aurizon Network expects that the new infrastructure constructed as part of the WIRP programme will initially require a low level of maintenance work. The incremental maintenance task is expected to be limited to scheduled preventative works, which include asset inspections and in the case of the track itself, the Track Recording Car activities, some rail grinding (as the need for this is strongly correlated to tonnage rather than condition/age), and limited resurfacing. No ballast cleaning, or renewal activities are likely to be required. In the absence of a major weather or other event (e.g. derailment), Aurizon Network expects that limited corrective works would be required.

This view is consistent with those expressed by the QCA and industry stakeholders as part of the consideration of the Goonyella to Abbot Point Expansion (GAPE) Draft Amending Access Undertaking. In particular, BHP Billiton Mitsubishi Alliance (BMA), who state that:

“...new rail infrastructure typically has a much lower maintenance requirement in the initial years of operation compared with the higher maintenance requirements of the older CQCR with old and sub-standard formation....It is expected that corrective maintenance requirements in the first five years will be minimal and the main focus will be on routine activities (e.g. inspections, track geometry assessments and manual maintenance of vegetation around easements). Given the GAPE infrastructure is an incremental expansion of QRNN's existing CQCR, QRNN's proposed GAPE cost base does not accurately reflect the incremental uplift in the routine maintenance workload which operates out of its existing business.”³⁶

It is important to recognise that the WIRP programme includes programme includes the renewal and replacement of existing assets in the Blackwater and Moura systems. These works are expected to improve the robustness and reliability of infrastructure in the Gladstone area and contribute to reductions in future maintenance costs.

WIRP Train Services are expected to commence first railings to WICET in Quarter 4 of FY2015 and WIRP volumes were taken into consideration when estimating Aurizon Network’s maintenance cost forecasts for the period of the 2014DAU. Aurizon Network has identified the Incremental Maintenance costs related to WIRP Train Services, and has expressed these amounts in nominal terms by applying the Maintenance Cost Index (MCI) expressed in Table 56 of the QCA’s Draft Decision.

The costs identified by Aurizon Network to be incremental to WIRP Train Services, i.e. those costs that would not be incurred if WIRP Train Services did not operate, are outlined in the table below.

Incremental Maintenance Costs (\$ million, Nominal)	FY2016	FY2017
WIRP_Blackwater	1.71	2.34
WIRP_Moura	0.12	0.24
WIRP_NCL	--	--
Total	1.83	2.57

Table 15: Incremental Maintenance Costs for WIRP Train Services

Aurizon Network’s operating costs mainly relate to staff required to plan, control, manage and administer infrastructure. Aurizon Network expects to make a number of productivity improvements during the period of the 2014DAU, and has not costed any additional Train Control resources.

In light of this, and the given the fact that WIRP related infrastructure (excluding the Wiggins Island Balloon Loop) is fully integrated with the existing Blackwater and Moura coal systems, Aurizon Network expects that the additional WIRP Train Services can be accommodated within its existing resource base.

Therefore, the value of incremental operating costs incurred as a direct result of WIRP Train Services is expected to be \$Nil.

³⁶ BMA submission to QCA: Draft Amending Access Agreement – GAPE Reference Tariffs, 16 November 2012.

3.3 Minimum CCC

The minimum CCC is defined in Subclause 4.1.1 as:

“...the sum of the following components of the Reference Tariff that applies to that Individual Coal System Infrastructure:

- (a) AT_2 (adjusted for any variation that will be made pursuant to Clause 3 of Part A for that Train Service); and*
- (b) fifty percentage points (50%) of AT_3 for the distance that the Train Service will travel on the mainline of that Individual Coal System Infrastructure.”*

The minimum CCC for WIRP train services has been calculated with respect to the Blackwater and Moura system Reference Tariffs for each year. The minimum CCC is a revenue requirement derived by applying the relevant forecast parameters (Reference Train Paths, Net Tonne Kilometres (NTK)) to the underlying Reference Tariffs, which exclude variations such as revenue cap.

As indicated in the calculation above, there is no prescribed minimum CCC for AT_5 (the minimum contribution is effectively \$nil).

Modelling of WIRP Reference Tariffs will be under the pricing principles approved for the 2010AU. In light of the fact that the QCA has not yet approved Reference Tariffs for the 2014DAU period, Aurizon Network has calculated the CCC with respect to the FY2015 Transitional Reference Tariffs, approved by the QCA on 12 June 2014.

The CCC calculated for FY2015 will be expressed as a unit rate (in terms of \$ per NTK) and escalated at an annual growth rate of 5%. These rates are outlined in the table below.

Min CCC Unit Rate (\$ per NTK, Nominal)	FY2015	FY2016	FY2017
Escalation	5.0%	5.0%	5.0%
WIRP_Blackwater	0.0036	0.0038	0.0040
WIRP_Moura	0.0050	0.0052	0.0055

Table 16: Minimum CCC Unit rate for WIRP_Blackwater and WIRP_Moura Train Services

This treatment is consistent with the approach applied to all non-WIRP customers to whom a CCC applies, and the recent Middlemount and Caval Ridge Alternative Access Charge submissions, approved by the QCA on 23 October 2014.

When combined with the independent volume forecasts specified in section 4 below, these unit rates result in the following CCC.

Contribution to Common Costs (\$ million, Nominal)	FY2016	FY2017
WIRP_Blackwater	16.7	18.6
WIRP_Moura	0.8	2.7

Table 17: Contribution to Common Costs for WIRP Train Services

3.3.1 Alternative WIRP_Moura Minimum CCC proposal

Aurizon Network has used the information contained within this submission to assess the pricing impact on both WIRP and non-WIRP customers operating in the Moura system.

The Incremental Costs associated with the WIRP_Moura Train Service are sufficiently high and require the WIRP_Moura Train Service to pay a premium in addition to the Moura system Reference Tariff. The strict application of Schedule F, subclause 4.1.2, requires WIRP_Moura to make a CCC in addition to its Private Incremental Costs and Incremental Costs. This results in WIRP_Moura paying Access Charges that are considerably higher (on a \$ per net tonne basis) than the price that non-WIRP customers would pay for a materially similar train service. This is outlined in the table below.

Average Moura Access Charge (\$ per NT, nominal)	FY2016	FY2017
Moura System (pre-WIRP)	3.10	3.05
Moura System (post-WIRP)	2.99	2.79
WIRP_Moura (incremental + CCC)	5.54	5.70

Table 18: Average Moura Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

The requirement for WIRP_Moura Train Services to pay a positive CCC effectively acts as a cross-subsidy, where the WIRP_Moura premium increases further and the Moura system Reference Tariff decreases. This creates further divergence between the Access Charges of WIRP and non-WIRP Train Services.

Where competing customers are charged a differential price for access to a service which is sufficiently similar in nature, this may have the effect of significantly distorting competition in the market.

Subclause 6.4.2 (b) of the 2010AU states that:

“Unless otherwise agreed with the QCA, where a new coal mine is developed and Train Services servicing that mine will utilise Rail Infrastructure in the Central Queensland Coal Region, the Train Services travelling between the mine ... and its most common destination will be incorporated in a new or existing Reference Train Service in a manner consistent with and subject to the requirements of Schedule F.”³⁷

This clause provides that the QCA has the ability to exercise its discretion in order to create pricing outcomes that differ from the requirements of Schedule F, subclause 4.1.2. Aurizon Network suggests that the QCA may wish to exercise this discretion, with respect to the WIRP_Moura CCC.

Aurizon Network proposes that the CCC for WIRP_Moura be set at \$Nil for the purposes of setting Reference Tariffs for the period of the 2014DAU. The pricing impact of this proposal (expressed on a \$ per NT basis) is outlined below:

³⁷ QR Network's 2010 Access Undertaking, pg. 53.

Alternative Average Moura Access Charge (\$ per NT, nominal)	FY2016	FY2017
Moura System (pre-WIRP)	3.10	3.05
Moura System (post-WIRP)	3.06	3.00
WIRP_Moura (incremental only; Nil CCC)	4.54	4.65

Table 19: Alternative average Moura Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

Under this 'alternative' proposal, WIRP_Moura will still be subject to a System Premium, however the average price of access for WIRP_Moura Train Services will fall by approximately \$1.00 per net tonne.

The price for non-WIRP Moura Train Services is expected to be lower (relative to the 'pre-WIRP' price) on the basis that the Moura system will still receive a CCC from WIRP_NCL Train Services, i.e. Non-WIRP customers in the Moura system will only be "worse-off" to the extent that they no longer receive the CCC from WIRP_Moura Train Services.

In light of the material differences in the price of access between WIRP and non-WIRP Train Services in the Moura system, Aurizon Network considers this treatment to be reasonable; provided that the WIRP_Moura Train Service continues to cover its incremental costs. Aurizon Network proposes that this alternative proposal will be reviewed on an annual basis³⁸ as the WIRP_Moura price converges with the Moura system price.

3.3.2 Minimum CCC for WIRP_NCL Train Services

In November 2011, Aurizon Network submitted (to the QCA) an Alternative Access Charge proposal for Train Services between the Colton mine (located approximately 15 kilometres (km) north of Maryborough) and Barney Point.³⁹ The proposal was approved by the QCA in March 2012.

As outlined in the submission, Train Services from this Customer's mine to Barney Point (and subsequently WICET) utilise a very small portion (approximately 8 km) of Aurizon Network's Rail Infrastructure between Parana and Gladstone.

In the Colton to Barney Point Alternative Access Charge submission, Aurizon Network identified that the Train Service in question:

"...is not consistent with the typical Access Rights for coal carrying train services for which the pricing requirement in Part 6 and Schedule F of the 2010AU have been established."

As a result, Aurizon Network proposed an alternative approach to calculating a minimum CCC for this Train Service, which resulted in a train path charge equivalent to \$1.09 per net tonne (in FY2012\$). This was approved by the QCA in its Final Decision.⁴⁰

³⁸ As part of the Annual Review of Reference Tariff process outlined in Aurizon Network's Undertaking.

³⁹ QR Network Submission on Colton to Barney Point Alternative Access Charge; November 2011.

⁴⁰ QCA Final Decision: QR Network's Proposed Alternative Access Charge for Colton to Barney Point Service; March 2012.

Aurizon Network proposes to calculate the minimum CCC for WIRP_NCL Train Services with reference to this unit rate. As it is expressed in FY2012\$, Aurizon Network proposes to escalate the unit rate using CPI for FY2013, which is consistent with approach applied to escalate Reference Tariffs during the UT3 Period. For the period covered by the 2014DAU, escalation will be at an annual growth rate of 5%. This treatment is consistent with the approach applied to all other customers to whom a CCC applies.

Min CCC Unit Rate (\$ per NT, Nominal)	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Escalation Rate	--	1.99%	5.0%	5.0%	5.0%	5.0%
WIRP_NCL	1.09	1.11	1.17	1.23	1.29	1.35

Table 20: Minimum CCC Unit rate for WIRP_NCL Train Services

The Access Charge payable for the Train Service between Colton and WICET will therefore be set at a level sufficient to cover its Incremental Capital and Maintenance Costs plus a minimum contribution to the common costs of the Moura system.

3.3.3 Summary of Minimum CCC

The table below summarises the minimum CCC proposed for WIRP Train Services. Calculations supporting these amounts are contained in the financial model provided concurrently with this submission.

Contribution to Common Costs (\$ million, Nominal)	FY2016	FY2017
WIRP_Blackwater	16.7	18.6
WIRP_Moura	--	--
WIRP_NCL	0.5	0.7
Total	17.2	19.2

Table 21: Contribution to Common Costs for WIRP Train Services

3.4 Revenue Deferral

Aurizon Network recognises the cost pressures faced by its customers in a challenging market. As a result, Aurizon Network proposes to defer a portion of its WIRP MAR during the period of the 2014DAU by applying a revenue smoothing factor.

The smoothing process is structured such that the Present Value (PV) of “unsmoothed” and “smoothed” revenue streams are equal. Aurizon Network solves an initial revenue requirement that, if escalated at a specified annual rate (smoothing factor), will result in a revenue stream that generates the same PV as the unsmoothed revenue stream.

Aurizon Network has applied a smoothing factor to WIRP MAR which aligns revenue recovery to the independent volume forecast specified in section 4 below. The smoothing factor is equivalent to the percentage increase in volumes year on year. It is important to note that this approach does not seek to recover WIRP MAR before WIRP volumes commence.

3.5 Summary of smoothed MAR requirement for WIRP Train Services

The smoothed revenue requirement necessary to assess the criteria outlined in Subclause 4.1.2 is summarised in the tables below:

MAR: WIRP_Blackwater (\$m)	FY2016	FY2017
Private Incremental Costs	--	--
Incremental Costs	61.1	66.6
Minimum CCC	16.7	18.6
Total	77.8	85.1

Table 22: Revenue Requirement: WIRP_Blackwater

MAR: WIRP_Moura (\$m)	FY2016	FY2017
Private Incremental Costs	1.8	1.8
Incremental Costs	3.7	12.1
Minimum CCC	--	--
Total	5.5	13.9

Table 23: Revenue Requirement: WIRP_Moura

MAR: WIRP_NCL (\$m)	FY2016	FY2017
Private Incremental Costs	--	--
Incremental Costs	0.1	0.1
Minimum CCC	0.5	0.7
Total	0.6	0.8

Table 24: Revenue Requirement: WIRP_NCL

4 Volume Forecasts

Access Rights for WIRP customers are currently contracted for 20 years, and the majority of WIRP customers will commence first railings to WICET in Quarter 4 of FY2015.

Reference Tariffs for coal carrying Train Services are calculated by splitting the approved MAR among various operational metrics. These metrics are derived from volume forecasts (expressed in terms of million net tonnes (mt)) and include Gross Tonne Kilometres (GTK), Train Paths, Net Tonne Kilometres (NTK) and electric Gross Tonne Kilometres (eGTK). As a result, the level at which volume forecasts are set is an important consideration.

It is important to recognise that Aurizon Network is subject to a revenue cap form of regulation. As a result, Aurizon Network has obligations and incentives to set a volume forecast that is as accurate as possible in order to meet its Rail Safety Act requirements and to minimise cashflow volatility for both Aurizon Network and its customers. Aurizon Network does not benefit by under or over stating volume forecasts. The Revenue Cap means that any variances between actual revenue received and the System Allowable Revenue approved by the QCA will be recovered (or returned) to customers via an adjustment to future Reference Tariffs.

In assessing WIRP Train Services against the provisions of the 2010AU, specifically Subclause 4.1.2, Aurizon Network must take volumes (specifically, NTK's associated with the new Train Services) into consideration. It is important to note that the 2010AU does not prescribe whether the NTK's are to be calculated with respect to volumes contracted by the new Train Services or forecast railings.

4.1 Aurizon Network's April-13 forecast

In setting its April-13 volume forecasts for WIRP Train Services, Aurizon Network considered the following factors:

- forecasts for the Blackwater and Moura systems exclusive of WIRP Train Services;
- contracted volumes for WIRP Train Services;
- ramp-up assumptions; and
- the principle of ensuring customers are responsible for the volumes they contract.

For the purposes of the 2013DAU, Aurizon Network set volume forecasts for WIRP Train Services at 90% of contract. It chose to do so because this treatment:

- was similar to the volume forecasts of the existing Blackwater and Moura systems (exclusive of WIRP Train Services). On average for the period of the 2013DAU, forecasts are:
 - 85% of contract for the Blackwater system; and
 - 90% of contract for the Moura system.
- accounts for the fact that the WIRP volume ramp-up profile is relatively fast; and
- recognises that WIRP Access Agreements contain Take-or-Pay provisions. If Take-or-Pay is triggered, a WIRP customer that doesn't rail its contracted capacity will be required to pay for their share of the shortfall.

The WIRP volume forecasts proposed by Aurizon Network in April 2013 are outlined in the table below.

Aurizon Network Apr-13 Volume Forecasts (mt)	FY2015	FY2016	FY2017
Total WIRP Stage 1	9.0	18.7	24.3

Table 25: Aurizon Network's April-13 volume forecasts for WIRP Train Services

4.2 QCA Draft Decision – Energy Economics forecast

As part of its public consultation process with respect to the 2013DAU, the QCA engaged Energy Economics to review Aurizon Network's forecast volumes. Aurizon Network considers the Energy Economics forecasts to be overly conservative for all coal systems, as evidenced by the material difference between its initial forecast for FY2014, and actual volumes railed for that year.

FY2014 Volumes – All Systems	Million Tonnes
Aurizon Network forecast – April 2013	199.6
Energy Economics forecast – April 2013	190.6
Energy Economics forecast – April 2014	211.0
FY2014 Actual Railings	214.5

Table 26: Comparison of FY2014 forecasts to actual railings

Energy Economics provided its initial forecast in a report released in July 2013⁴¹. Energy Economics forecasted total railings for all systems of 816.3 million tonnes (mt) for the period FY2014 to FY2017, 10.3% below the forecasts of Aurizon Network. Energy Economics proposed a forecast for WIRP Train Services as outlined in the table below:

Energy Economics Jul-13 Volume Forecasts (mt)	FY2015	FY2016	FY2017
Total WIRP Stage 1	--	5.7	10.3

Table 27: Energy Economics July-13 volume forecasts for WIRP Train Services

With respect to WIRP Train Services, Energy Economics stated that it had been:

"...less bullish than Aurizon Network in terms of the speed of development of mining projects destined to utilise the new Wiggins Island Coal Export Terminal, and in some cases the ultimate production levels of these mines. Project financing and environmental permits are still not in place for some of these proposed mines."⁴²

What the above statement fails to recognise is that 78% of volumes contracted at WICET will be sourced from mines already well-established and operating in the CQCR.

⁴¹ Energy Economics, July 2013, Central Queensland Coal Railings Forecast.

⁴² Energy Economics, July 2013, Central Queensland Coal Railings Forecast, pg. 26.

Aurizon Network has a number of concerns about the Energy Economics forecasts. Aurizon Network believes Energy Economics has failed to consider take-or-pay obligations when setting its forecasts. Views of take or pay impacts upon producers and railings are not new. During the 9th Coaltrans Australia conference held during August 2013, the Queensland Resources Council (QRC) stated:

“The only factor preventing more mines or parts of mines being put on care and maintenance is the existence of substantial fixed costs in the form of take or pay commitments for rail and port capacity.”⁴³

Whilst Energy Economics agreed that take-or-pay commitments incentivise producers to maximise throughout, Energy Economics also stated that such commitments were only one factor in regards to volume forecasting.⁴⁴ Aurizon Network agrees with this statement, but believes this is one important factor that is particularly relevant in the current economic climate.

As part of its Draft Decision on MAR, the QCA published an updated Energy Economics forecast (September 2014). The revised forecast accounts for strong railings observed in FY2014 and Energy Economics uplifted its forecast for FY2014 by 20 million tonnes. However, on average, the revised Energy Economics forecast is still substantially lower than Aurizon Network’s April 2013 forecasts.

With respect to WICET, Energy Economics states:

“...stage one of the new Wiggins Island Coal Export Terminal at Gladstone is designed to provide 27 million tonnes of annual capacity in 2015.”⁴⁵

And that:

“The construction of the Wiggins Island Coal Export Terminal remains on schedule, with the consortium recently estimating that the first coal shipment from the terminal will take place in November 2014. Completion of commissioning is expected in March 2015. Our 2013 forecasts assumed significant WICET exports would not commence until ca. mid 2015, hence it is likely that the build-up in coal exports through WICET will start earlier than forecast. This is expected to only result in a transfer of forecast tonnage from the existing Gladstone coal terminals to WICET, rather than a change to the total coal exports through the Port of Gladstone.”⁴⁶

The revised volume forecasts proposed by Energy Economics are outlined in the table below.

Energy Economics Sep-14 Volume Forecasts (mt)	FY2015	FY2016	FY2017
Total WIRP Stage 1	2.1	6.7	10.8

Table 28: Energy Economics September-14 volume forecasts for WIRP Train Services

⁴³ International Mining, 2013, The future for Australian coal – Queensland Resources Council, 13 August 2013.

⁴⁴ Energy Economics, 2013, Blackwater DAAU – Energy Economics response to stakeholder submissions on its report “Blackwater System Coal Railings Forecast”, 28 August 2013.

⁴⁵ Energy Economics, September 2014, Coal Railings Forecast for Central Queensland, pg. 16.

⁴⁶ Ibid.

Aurizon Network understands that Energy Economics did not have any level of engagement with WIRP customers directly when setting its revised volume forecasts. Both Aurizon Network and WIRP customers consider the Energy Economics forecasts to be considerably understated.

When compared to both medium and long-term forecasting, short-term forecasts should inherently prove to be more accurate as a result of lower degrees of variability attributable to input variables. Actual railings for FY2014 were 12.5% higher than the Energy Economics forecast published in July-13. This raises considerable concerns about the amount of forecast error already contained in the longer-term forecasts of the Energy Economics predictions.

As a result, Aurizon Network has sought out an alternative independent volume forecast.

4.3 Proposed Independent Volume forecast

John T Boyd Company (JT Boyd) has completed an independent technical review of the production schedules for the mines and projects with capacity allocations as part of the WICET Stage 1 development. Aurizon Network understands that this report was prepared for WICET's financiers and represents a balanced and prudent forecast of volumes.

As outlined in the JT Boyd report:

“Each mine was assessed regarding:

- *Mine approvals process and timing.*
- *Mine development schedule and capacity to produce coal to supply to WICET from April 2015.*
- *Production ramp up schedules and the proposed annual production for the first ten years of production.*
- *Supporting infrastructure including rail connection to main line, power, and water supply.*

Risks to achieving WICET Stage 1 coal supply project schedules, production plans (i.e., ramp up schedule and consistent mine production over ten years) were identified.”⁴⁷

This addresses the concerns raised by Energy Economics⁴⁸ with respect to the speed of development of mines utilising WICET.

⁴⁷ WICET Stage 1 Mine Production Summary for QCA; John T Boyd Company; December 2014, pg. 2-1

⁴⁸ Energy Economics, July 2013, Central Queensland Coal Railings Forecast, pg. 26.

The JT Boyd report also recognises that:

“Bandanna Energy Limited entered voluntary administration in September 2014 hence the potential for coal supply to WICET...has been excluded from tonnage estimates presented in this review....BOYD considers that given the advanced status of the Project, there is potential for it to proceed to the production phase. However, the timing for commencement of production remains uncertain.”⁴⁹

JT Boyd has estimated three (High, Mid and Low) production profiles to provide a range of likely outcomes. While the High and Low Case scenarios are intended to reflect optimistic and pessimistic views of production, JT Boyd considers that the Mid Case scenario represents the ‘most likely’ outcome.

JT Boyd’s commentary about the Mid Case scenario is outlined below:

“This was the outcome that BOYD considers most likely to occur. Mining lease approvals are expected to be completed as estimated by BOYD’s mining approvals timeline template. Mine development activities were expected to be completed as per the Proposer’s schedule provided this could be justified having consideration for durations typically achieved by other projects. For the open cut mines, annual production matched the Proposers’ schedules. Where underground reserves were based on Measured Resources, underground mine annual production as provided in accordance with the Proposers’ schedules, were accepted. For underground schedules predominantly based on Indicated Resources, annual production was de-rated following review of the productivity assumptions used in the proposed schedules. The assessment included consideration of potential improvements resulting from the deployment of new underground mining equipment.”⁵⁰

JT Boyd has conducted a detailed production review of each individual customer expected to be part of the WICET Stage 1 development. As a result, Aurizon Network considers that the JT Boyd forecast represents a more reasonable estimate of expected WIRP railings, than that provided by Energy Economics.

JT Boyd’s forecasts are presented on an annualised basis for each quarter ending June 2015 until June 2021. Aurizon Network has calculated a weighted average of these quarterly forecasts, in order to present a single annual forecast of expected railings.

Aurizon Network proposes to adopt JT Boyd’s Mid Case forecast of WIRP_Blackwater volumes for the purposes of assessing WIRP Train Services against the requirements of the 2010AU. [REDACTED]

[REDACTED]

[REDACTED]. Aurizon Network has used a WIRP_Moura forecast which is lower than the forecast proposed by JT Boyd. This reflects recent discussions with the relevant customer with respect to deferring their contracted volume ramp-up.

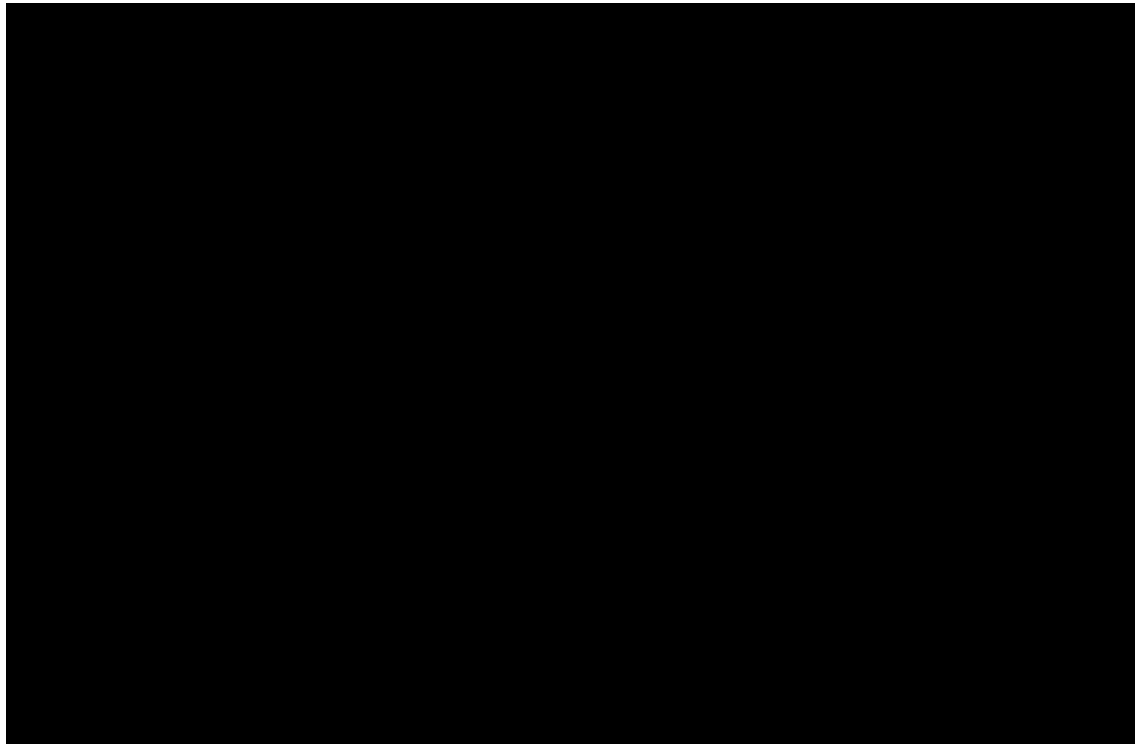
⁴⁹ WICET Stage 1 Mine Production Summary for QCA; John T Boyd Company; December 2014, pg. 1-1

⁵⁰ WICET Stage 1 Mine Production Summary for QCA; John T Boyd Company; December 2014, pg. 2-2

The proposed annual volume forecast, representing JT Boyd's Mid Case scenario is outlined in the table below.

These forecasts have been provided in-confidence and redacted from this public submission. However, a detailed report has been provided to the QCA to enable them to make a decision on the proposed Reference Tariffs.

Figure 3 below, provides a graphical illustration of the aggregate volume forecasts for WIRP Train Services between FY2015 and FY2017. Aurizon Network considers JT Boyd's Mid Case scenario to be a reasonable and balanced view of expected WIRP railings during this period.



5 Proposed Reference Tariffs

5.1 Application of Subclause 4.1.2

In order to determine the Reference Tariff applicable to this Train Service, Aurizon Network must calculate the Access Charges which would be payable under the criteria specified in Subclause 4.1.2 of the 2010AU. To reflect the requirements of this subclause, the resulting Access Charges are expressed in terms of \$ per Net Tonne Kilometres (NTK). The results are outlined in the tables below:

\$ per NTK: WIRP_Blackwater	FY2016	FY2017
Criteria (a) – Reference Tariff	0.0178	0.0188
Criteria (b) – Incremental Costs + CCC	0.0176	0.0182

Table 30: WIRP_Blackwater Access Charges expressed in \$ per NTK

\$ per NTK: WIRP_Moura	FY2016	FY2017
Criteria (a) – Reference Tariff	0.0220	0.0218
Criteria (b) – Incremental	0.0349	0.0278

Table 31: WIRP_Moura Access Charges expressed in \$ per NTK

There is no applicable ‘existing’ Reference Tariff against which to assess the WIRP_NCL Train Service. Given the unique characteristics of this Train Service relative to those currently operating in the Blackwater and Moura systems, Aurizon Network proposes that an Incremental Reference Tariff should apply to the WIRP_NCL Train Service.

The results above indicate that for:

- WIRP_Blackwater, criteria (a) exceeds criteria (b), therefore a socialised Blackwater system Reference Tariff should apply.
- WIRP_Moura, criteria (b) exceeds criteria (a), therefore an Incremental Reference Tariff should apply. This will be effected by applying a System Premium on top of the Moura system Reference Tariff for WIRP_Moura Train Services. However, the resulting System Premium will then be discounted by the MAR associated with the Private Incremental Costs associated with the WIRP_Moura Train Service.

5.2 Reference Train

The Reference Train configuration for WIRP Train Services operating in both the Blackwater and Moura coal system is equivalent to that of the Blackwater coal system. The relevant Reference Train characteristics are outlined in Schedule F of Aurizon Network’s Undertaking.

5.3 Proposed Reference Tariffs

As indicated above, Aurizon Network proposes that:

- WIRP_Blackwater and 'non-WIRP' Blackwater customers will pay a revised Blackwater system Reference Tariff, which reflects the requirements of Subclause 4.1.2. This is expressed on a \$ per NT basis in the table below:

Average Blackwater Access Charge (\$ per NT, nominal)	FY2016	FY2017
Blackwater System (pre-WIRP)	6.98	6.98
WIRP_Blackwater (incremental + CCC)	6.23	6.42
WIRP and non-WIRP Socialised	6.60	6.61

Table 32: Average Blackwater Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

- WIRP_Moura customers will pay the current Moura system Reference Tariff, plus a System Premium. This is expressed on a \$ per NT basis in the table below:

Average Moura Access Charge (\$ per NT, nominal)	FY2016	FY2017
Moura System (pre-WIRP)	3.10	3.05
Moura System (post-WIRP)	3.06	3.00
WIRP_Moura (incremental)	4.54	4.65

Table 33: Average Moura Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

Reference Tariffs for the WIRP_NCL Train Service are structured in a manner consistent with the Colton to Barney Point Alternative Access Charge submission⁵¹, approved by the QCA in March 2012. This Train Service will pay:

- the AT1 Reference Tariff component for the Moura system; and
- a train path charge equivalent to recover the Incremental Costs and minimum CCC associated with the WIRP_NCL Train Service.

Average WIRP_NCL Access Charge (\$ per NT, nominal)	FY2016	FY2017
WIRP_NCL (incremental)	1.52	1.53

Table 34: Average Moura Access Charges; \$ per NT; excludes Revenue Cap Adjustments.

Aurizon Network proposes the following:

- The Blackwater or Moura system Reference Tariff (where relevant) will be applied to any WIRP Train Services operated during FY2015. Access revenues and volumes associated with these

⁵¹ QR Network Submission on Colton to Barney Point Alternative Access Charge; November 2011.

Train Services will be quarantined from the Blackwater or Moura System Allowable Revenues (revenue cap) including Take-or-Pay system tests.

- Any access revenues received from WIRP Train Services in FY2015 will be credited against WIRP allowable revenues, which are added to the Blackwater and Moura System Allowable Revenues from FY2016 onwards.
- For WIRP Train Services operated from FY2016 onwards, the Blackwater or Moura system Reference Tariff (where relevant) will be applied until such time as the QCA makes its final determination on WIRP pricing matters.

The proposed Reference Tariffs applicable to WIRP Train Services operating in the Blackwater and Moura coal systems are presented below. These Reference Tariffs are 'transitional' as the final Reference Tariffs for the period of the 2014DAU are yet to be approved. Aurizon Network has escalated the FY2015 transitional AT₁ and AT₂ Reference Tariffs⁵² using a forecast Consumer Price Index (CPI) of 2.5%. The AT₃, AT₄ and AT₅ Reference Tariffs have been calculated to reflect the requirements of Subclause 4.1.2 of the 2010 Access Undertaking (2010AU).

Blackwater System Reference Tariffs	FY2015[^]	FY2016	FY2017
AT ₁ (\$ / '000 gtk)	0.88	0.90	0.93
AT ₂ (\$ / tp)	2,069.85	2,121.60	2,174.64
AT ₃ (\$ / '000 ntk)	4.84	6.04	5.99
AT ₄ (\$ / nt)	1.60	2.08	2.07
AT ₅ (\$ / '000 egtk)	4.04	3.27	3.11

Table 35: Proposed Reference Tariffs: Blackwater System. Applicable to WIRP and non-WIRP Train Services.

[^] FY2015 rates incorporate the FY2013 Revenue Cap adjustment amounts.

Moura System Reference Tariffs	FY2015[^]	FY2016	FY2017
AT ₁ (\$ / '000 gtk)	1.64	1.68	1.72
AT ₂ (\$ / tp)	620.00	635.50	651.38
AT ₃ (\$ / '000 ntk)	8.24	7.39	7.18
AT ₄ (\$ / nt)	1.35	1.21	1.18
AT ₅ (\$ / '000 egtk)	--	--	--

Table 36: Proposed Reference Tariffs: Moura System. Applicable to non-WIRP Train Services.

[^] FY2015 rates incorporate the FY2013 Revenue Cap adjustment amounts.

WIRP_Moura System Premium	FY2015	FY2016	FY2017
AT ₃ (\$ / '000 ntk)	0.00	6.36	7.27

Table 37: Proposed system premium applicable to WIRP_Moura Train Services. This is charged in addition to the Moura system AT₃ Reference Tariff above.

⁵² Approved by the QCA on 12 June 2014.

WIRP_NCL Reference Tariff	FY2015	FY2016	FY2017
AT ₁ (\$ / '000 gtk)	N/A	1.68	1.72
AT ₂ (\$ / tp)	N/A	1,872.86	1,879.39
AT ₃ (\$ / '000 ntk)	N/A	--	--
AT ₄ (\$ / nt)	N/A	--	--
AT ₅ (\$ / '000 egtk)	N/A	--	--

Table 38: Proposed Alternative Reference Tariff: Applicable to WIRP_NCL Train Services

Note that the figures in the tables exclude the impact of Revenue Cap adjustment amounts, which may be applicable to FY2016 or FY2017. This presentation is consistent with Schedule F of the 2010AU.

5.4 Customer Impact

The independent JT Boyd forecast provides a prudent assessment of volumes which WICET and WIRP customers expect to achieve in the relevant years. Aurizon Network proposes that this forecast will be used for the basis of setting Reference Tariffs and the relevant Take-or-Pay system test triggers.

As a result, it does not alter the risk profile that non-WIRP users currently face with respect to triggering Take-or-Pay. The JT Boyd forecast is more conservative than Aurizon Network original proposal (as outlined in the 2013DAU), and should give non-WIRP customers comfort that Take or Pay will not automatically trigger as a direct result of overstated forecasts. It is important to note that to the extent that Take-or-Pay does trigger⁵³, the exposure individual customers face is limited to the extent that they under-rail relative to the volumes they themselves have contracted.

Aurizon Network has assessed WIRP Train Services against the requirements of the 2010AU and, at a reasonable and independent volume forecast, has demonstrated that the price for non-WIRP users in the Blackwater system will be lower under a socialised pricing approach. In other words, WIRP volumes forecast to rail in the Blackwater system are sufficient to cover the Incremental Costs and make a positive contribution to the system common costs, therefore reducing the average system price for all users.

WIRP Train Services operating in the Moura system will initially pay a System Premium on top of the Moura system Reference Tariff in FY2016 and FY2017. This premium will be discounted to reflect the relevant customer's Private Incremental Costs. However, the analysis shows that a socialised pricing approach would be appropriate when WIRP_Moura volumes reach full utilisation. In the event that WIRP_Moura volumes ramp-up faster than anticipated, the Reference Tariff may be amended as part of the Annual Review of Reference Tariff process outlined in Aurizon Network's Undertaking.

Under the proposal for socialisation of Blackwater system Reference Tariffs, a combined MAR and System Allowable Revenue (SAR) would be approved by the QCA for Blackwater and WIRP_Blackwater customers.

The SAR will be invoiced via AT₂₋₅ Reference Tariffs. In the event of an over-recovery of SAR, this would be returned via the revenue cap process through Reference Tariffs two years after the year of the over recovery.

⁵³ Note that the system trigger for Take-or-Pay is set based on a forecast of volumes which is typically lower than volumes contracted.

In the event of an under-recovery of SAR, Take or Pay would be calculated if GTK's actually railed in the System were below the regulatory forecast GTK's. All customers would be liable for Take or Pay up to a maximum of their revenue requirement at contracted volumes. However, the Take or Pay for each liable customer would be capped on a percentage basis to ensure Aurizon Network does not receive more than the AT₂₋₄ SAR shortfall for that year. The capping percentage would be based on the total AT₂₋₄ shortfall as a percentage of the maximum Take or Pay for all customers.

In the event that there is still an SAR shortfall in after Take or Pay is recovered, the balance would be recovered via the Revenue Cap process. This would be in addition to any AT5 shortfall.

For WIRP_Moura and WIRP_NCL, the same principles would apply as for WIRP_Blackwater i.e. WIRP_Moura and Moura customers would have a combined MAR and SAR. The difference being that WIRP_Moura customers would have higher reference tariffs (as a result of the system premium) in the billing of both Total Actual Revenue and Take or Pay (if applicable) calculations.

6 Glossary

In the submission:

- References to Aurizon Network are to Aurizon Network Pty Ltd, operator of the Central Queensland Coal Region;
- References to the 2010AU are to Aurizon Network's 2010 Access Undertaking;
- References to the 2013DAU are to Aurizon Network's proposed 2013 Draft Access Undertaking;
- References to the 2014DAU are to Aurizon Network's proposed 2014 Draft Access Undertaking;
- References to UT3 are to the period of the 2010AU;
- References to UT4 are to the period of the 2013DAU and the 2014DAU;
- References to FY are to the relevant financial year ending on 30 June;
- Unless expressly stated otherwise, all references to Clauses, Subclauses and Paragraphs refer to clauses, subclauses and paragraphs in Schedule F, Part B of the 2010AU; and
- Defined terms have the meaning given in the 2010AU.