

QLD COMPETITION AUTHORITY

- 5 AUG 2013

DATE RECEIVED



Dr Malcolm Roberts  
Chairman  
Queensland Competition Authority  
GPO Box 2257  
Brisbane QLD 4001

30 July 2013

Dear Malcolm,

**Review Event Submission – Central Queensland Flood January 2013**

I am pleased to submit to the Queensland Competition Authority (QCA) proposed variations to the Blackwater and Moura coal system transitional reference tariffs for the 2013-14 year which are necessary to allow cost recovery of repair works undertaken to restore rail infrastructure following significant flooding.

Over the period of late January 2013 the Central Queensland Coal Region was subject to wide spread flooding. The flooding caused substantial damage to rail infrastructure which required Aurizon Network to incur additional costs which were not recovered through the published reference tariffs applicable for that period.

The total amount Aurizon Network is seeking to recover through a variation to Reference Tariffs is approximately \$17.1 million (in 2012/13 terms). These costs will be incurred in both the 12/13 and 13/14 financial year.

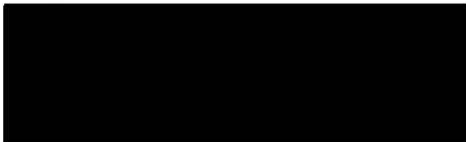
As the costs associated with restoring train services on the affected coal systems exceeds \$1 million the attached submission is a variation to reference tariffs with respect to a prescribed review event in accordance with Section F, Part A, Clause 2.2.1(b), of the 2010 Access Undertaking.

The attached submission provides details of the incremental costs, data and the methodology used to vary the relevant reference tariffs.


Aurizon Network looks forward to assisting the QCA in its consideration of the proposed reference tariff variations.

Should you have any questions in relation to this submission please contact Matthew Cronin, Manager – Network Regulation (07) 3019 7768 or via email at [matthew.cronin@aurizon.com.au](mailto:matthew.cronin@aurizon.com.au)

Yours sincerely,



Michael Carter  
Chief Executive Officer  
Aurizon Network Pty Ltd





# Review Event Submission Central Queensland Flooding January 2013

2010 Access Undertaking





## Executive Summary

The majority of the East Coast of Queensland experienced heavy rainfall during the period from 22 to 29 January 2013 (the flood event) as a result of former tropical cyclone Oswald tracking southwards. This resulted in widespread flooding throughout the regions along the East Coast as the system moved in a slow South-Southeast direction.

The impact of this rainfall and subsequent flooding on the Aurizon Network infrastructure was significant and was only rectified through a focused effort to safely restore the coal rail system as quickly as possible.

Further rain events and subsequent flooding in February 2013 affected the Aurizon Network, however this effect was significantly smaller than the January flooding.

Aurizon Network through its Access Undertaking (UT3) is able to recover costs over and above those included in the Reference Tariffs where it meets a certain criteria. Aurizon Network confirms that the criteria in clause 2.2.7 of Schedule F of the 2010 Access Undertaking (the UT3 Provisions) regarding the occurrence of this Flood Event equates to a Review Event.

## Incremental cost estimates

Aurizon Network's cost pass-through claim is estimated to be \$17,157,174 (in 2012/13 terms), incurred in both the 2012/13 and 2013/14 financial year for the North Coast Line, Blackwater and Moura systems. A breakdown of these costs is indicated in Table 1.

Table 1

System	Ballast \$	Labour Ordinary \$	Labour Overtime \$	Consumables \$	Resurfacing \$	Inventory \$	Overheads \$	Total Costs \$
Blackwater	319,979	2,055,230	69,886	3,579,959	1,643,030	158,588	636,899	8,463,572
Moura	644,762	461,738	88,078	3,946,084	273,579	74,220	704,680	6,193,142
North Coast Line <sup>1</sup>	260,034	572,802	26,675	1,204,152	241,269	32,449	163,080	2,500,461
<b>Total</b>	<b>1,224,776</b>	<b>3,089,770</b>	<b>184,639</b>	<b>8,730,195</b>	<b>2,157,879</b>	<b>265,257</b>	<b>1,504,659</b>	<b>17,157,174</b>

The approach adopted in preparing this submission for this cost pass-through, is that only incremental costs associated with Aurizon Network's response to the flooding have been claimed. To achieve this intent, Aurizon Network has excluded all asset renewal and replacement costs which will be subject to the QCA's 'ex post' capital expenditure approval process under UT3. This approach and methodology is consistent with Aurizon Network's 2011 'Review Event Submission – Central Queensland Flooding'.

Due to the evolving nature of the flood event, Aurizon Network's response was labour intensive, not only requiring the assignment of the majority of internal labour field resources to the flood affected areas but also making extensive use of contract labour and equipment. The maintenance activities undertaken during the flood response were on a corrective (as opposed to preventative) basis. Due to the latent nature of some track damage, this submission includes a cost estimate for works attributable to the flood event, which have not yet been incurred.

## Revenue and Tariff adjustments

It is proposed that the variation to the relevant Transitional Reference Tariffs associated with the Review Event, be retrospectively applied from 1 July 2013. This variation is subject to QCA approval.

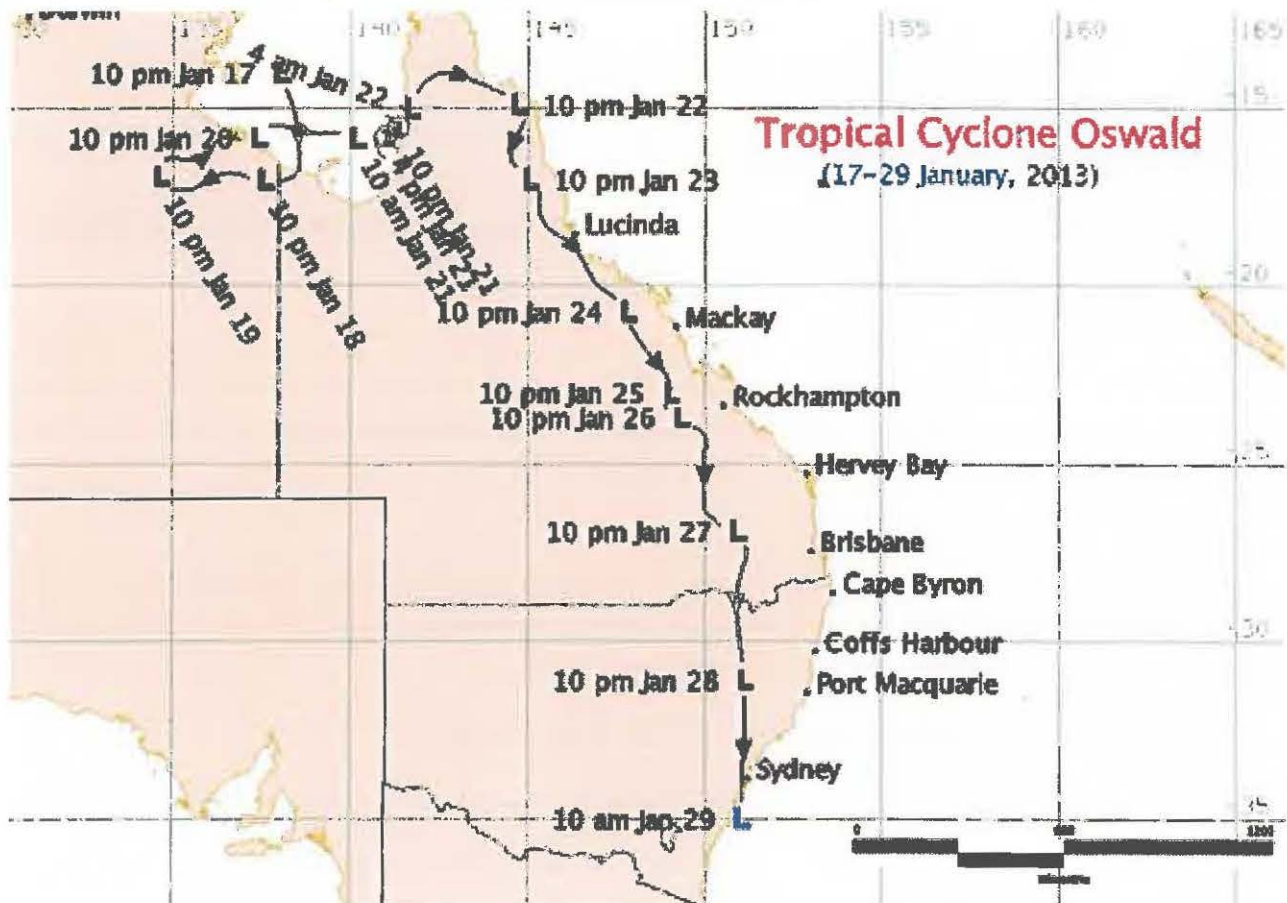
<sup>1</sup> The North Coast Line costs are included within the Blackwater Systems tariffs.



# 1. Introduction

On the 17 January 2013, an area of low pressure developed over the Gulf of Carpentaria. After making landfall and moving back out to sea, it developed into Tropical Cyclone Oswald on 21 January 2013. Oswald formed in the Gulf of Carpentaria on 21 January, and made landfall that night near Kowanyama, on the west coast of Cape York Peninsula, as a category 1 system. It rapidly weakened after landfall and was downgraded to a tropical low on the morning of 22 January. The low then moved near the east coast, being centred off Cooktown on 23 January and then tracked slowly to the south-southeast just inland from the coast. The low stalled west of Rockhampton for two days on the 25th and 26th, producing over 1000 mm of rainfall in some areas during the 48 hours, accompanied by major flooding<sup>2</sup>. The low then resumed a southwards track to be centred near Dalby on the 28th. It then accelerated southwards and moved offshore near Sydney on the 29th before moving out to sea. There are few close precedents in the last 50 years for the track of Oswald<sup>3</sup>.

Figure 1 – Path of ex-tropical cyclone Oswald (source BOM – Tropical Cyclone Oswald Impacts)



On the 25<sup>th</sup> of January, extreme rainfalls were experienced in the Rockhampton area. A number of areas within a 40 kilometre radius of Rockhampton exceeded 400 millimetres of rain, including 587 millimetres at Upper Dee (near Mount Morgan) and 556 millimetres at Pacific Heights. Rockhampton itself received 349 millimetres<sup>4</sup>. Appendix 1, shows the level of rainfall over the Rockhampton area on the 25 January 2013 including the location of that rain in reference to the Aurizon Network's Blackwater and Moura systems.

Aurizon Network declared a Force Majeure for the Blackwater and Moura systems commencing on the 24 January 2013. The Blackwater system was not open to through traffic until 13:40 on 7 February and the Moura system was not open until 17:58 on the 19 February 2013. Both of the systems were impaired by a number of speed restrictions after reopening to ensure safe operations of the railway.

<sup>2</sup> BOM Monthly Weather Review, Queensland, January 2013, 2 May 2013, Page 2

<sup>3</sup> BOM Special Climate Statement 44 – Extreme Rainfall and Flooding in coastal Queensland and New South Wales 5 February, Pg 1

<sup>4</sup> BOM Special Climate Statement 44 – Extreme Rainfall and Flooding in coastal Queensland and New South Wales 5 February, Pg 2

Aurizon Network launched an intensive recovery operation and undertook considerable additional activities in the subsequent months, responding to the supply chain by ensuring the network was available as soon as practicable for traffic and enabling the safe restoration of coal carrying train services.

Due to the scale of this event and the lengthy recovery effort, Aurizon Network applied for an extension of time to submit a cost pass-through application in relation to this Flood Event and its associated cost as provided for by the UT3 Provisions. The Queensland Competition Authority (QCA) granted an extension until 30 June 2013. On the 28 June 2013, Aurizon Network requested a further extension until 15 July 2013 where the QCA approved an extension until 31 July 2013. This application is being provided to the QCA consistent with that request and approval.

Aurizon Network's Flood Event cost pass-through claim is for \$17,157,174 (in 2012/13 terms). This figure includes an estimated cost of \$4,251,000 for works still to be undertaken. These works have been provided for in the future closure regime and will be progressively undertaken by the business to limit the impacts to the supply chain whilst maintaining the integrity of the network. Accordingly the costs of the flood will be accounted for across the 2012/13 and 2013/14 financial years.

## 2. Regulatory provisions

### 2010 Access Undertaking (UT3)

Clause 2.2.1, Schedule F of UT3 provides that Aurizon Network may seek approval from the QCA to vary a Reference Tariff if a Review Event has or will occur where:

Review Event means:

(a) *where Aurizon Network's maintenance costs have been prudently and efficiently incurred, but are greater than its maintenance cost allowance, which has caused, or will cause, a change in the costs reflected in the AT3, AT4 and/or AT5 components of a Reference Tariff specified in Part B of Schedule F, of greater than two and a half percentage points (2.5%);*

(b) *a change in Aurizon's maintenance practices, reasonably requested by an Access Holder or Customer subsequent to the Commencing Date, which has caused, or will cause a change in the costs reflected in the AT3, AT4 and/or AT5 components of the relevant Reference Tariff;*

*of greater than two and a half percentage points (2.5%) excluding the impact of:*

(i) *any change in maintenance practices that have previously resulted in a variation of the Reference Tariff since the Approval Date; and*

(ii) *any adjustment to the Reference Tariff to reflect changes in the MCI;*

(c) *a Force Majeure Event – of the type set out in either paragraph (v) or (xii) of the definition of that term – affecting Aurizon Network to the extent that Aurizon Network has incurred or will incur additional incremental costs of greater than \$1 million that have not previously resulted in a variation of the relevant Reference Tariff;*

(d) *the implementation of a self-insurance function for Aurizon Network, by no later than 31 December 2010, which must include:*

(e) *a resolution by the Aurizon Network Board resolving which events are being self-insured and acknowledging that it is considered that Aurizon Network will have sufficient financial capacity to assume such self-insurance risks;*

(f) *operation of an appropriate claims management system and implementation of other procedures to ensure that full and accurate costs of any self-insured losses are identified and claimed by Aurizon Network;*

- a. *varying accounting systems to establish a self-insurance fund and separate expense items for self-insurance;*
- b. *expanding the current claims management team to provide sufficient capacity to assess and manage additional claims against self-insured risks including the pursuit of recovery against third parties (including QR Parties) where appropriate;*
- c. *establishing any other appropriate policies, processes and procedures for the management of claims against self-insured risks; and*
- d. *either demonstrating to the QCA that self-insured losses would not be otherwise recovered through revenue recovery provided for by this Undertaking, or submitting a Draft Amending Undertaking to remove the potential for any such recovery;*

*(e) an increase in the number of contracted coal carrying Train Services using Rail Infrastructure between Burngrove and Minerva;*

*(f) where Aurizon Network has committed to developing a Significant Investment; or*

*(g) any other material change in circumstances that Aurizon Network can reasonably demonstrate may give risk to a need to vary the relevant Reference Tariff;*

*in respect of which Aurizon Network has given written notice to the QCA of Aurizon Network's intention to propose a variation to that Reference Tariff under Clause 2.2, Part A of Schedule F.*

If an application relates to a Force Majeure Event, the Review Event must relate to any cause, event or circumstance or combination of causes, events or circumstances which are beyond the reasonable control of the affected party and by the exercise of due diligence the affected party was not reasonably able to prevent or is not reasonably able to overcome. Also for the purposes of a Review Event application, the Force Majeure Event refers to:

Act of God (v); or

Fire, flood, earthquake, washaway, landslide, explosion or other catastrophe, epidemic and quarantine restriction (xii).

The impact of a Force Majeure Event must also result in Aurizon Network incurring additional incremental costs of greater than \$1 million and these costs must not have previously resulted in a variation of the relevant Reference Tariff.

If Aurizon Network submits a variation of a Reference Tariff in accordance with Clause 2.2.1 (b)(i), Schedule F in relation to a Review Event it must nominate the Reference Tariff to be varied, include evidence the Review Event has occurred or will occur and include details of the methodology, data and assumptions used to vary the Reference Tariff.

The QCA may approve the proposed variation if it is satisfied that (Clause 2.2.7, Schedule F):

- i. *the Review Event has occurred or will occur; and*
- ii. *the variation of the relevant Reference Tariff:*
  - a. *is consistent with the change in the cost resulting from or that will result from the Review Event; and*
  - b. *reflects the impact of the relevant Review Event on the financial position of Aurizon Network (including the impact of incremental maintenance and incremental capital costs); and*
- iii. *has been calculated as if all other Reference Tariffs were also being recalculated due to the occurrence causing or that will cause the Review Event.*



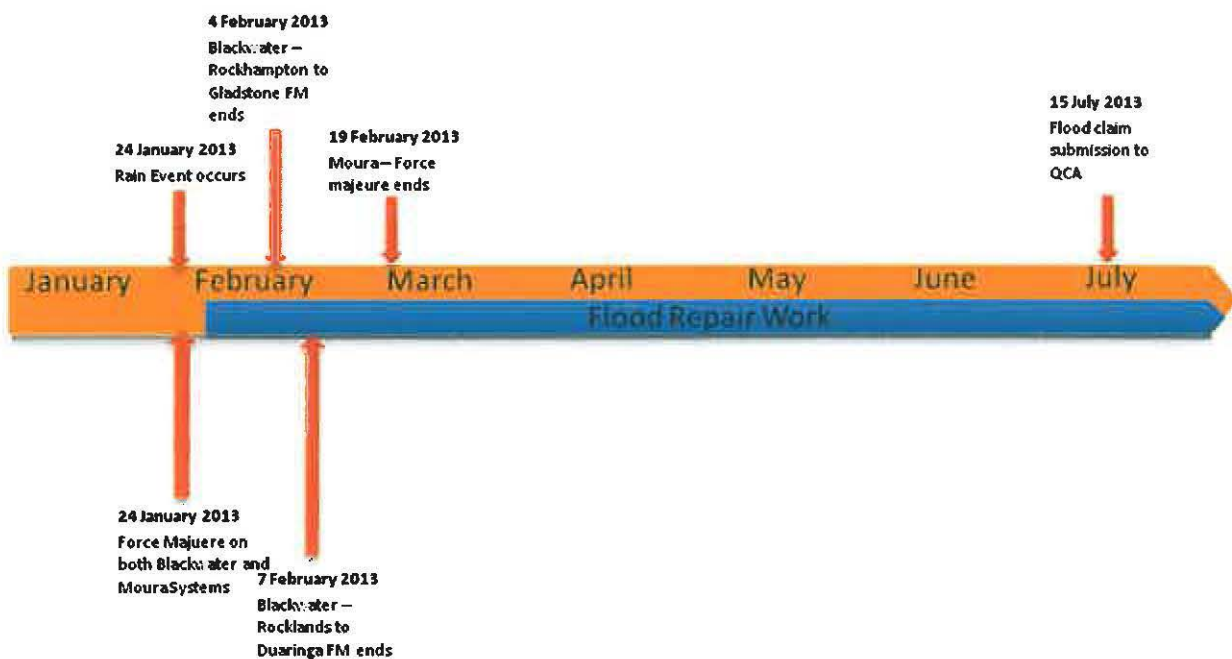
An application to vary a Reference Tariff must be submitted to the QCA within 60 days of the Review Event occurring. However the QCA may grant Aurizon an extension of the time for submitting its application. In regard to this claim the QCA granted Aurizon Network with an extension of time to provide the 2013 review event submission until the 31 July 2013.

## 2013 January Summer Floods are a Review Event

### A Force Majeure Event

The 2013 January Floods was an uncontrollable and unexpected event, the occurrence of which could not have been prevented or mitigated by Aurizon Network. Figure 2, indicates a timeline on the Flood related events, including Force Majeure (FM) declaration timings for the relevant systems:

Figure 2 – Sequence of Events



The rectification works associated with this Flood Event were not considered in the “business as usual” Maintenance and Operating costs provided for in the UT3 Maintenance Submission and therefore not provided for in the relevant tariffs.

Aurizon Network considers the January 2013 flood event satisfies the definition of a Force Majeure Event both in terms of the floods being beyond the reasonable control of Aurizon Network and its impact could not have been mitigated as part of prudent network planning.

Therefore Aurizon Network considers the costs associated with our response to the Flood Event represent a Review Event for the purposes of UT3, provided the incremental cost of the Force Majeure Event meets the financial materiality threshold.

### Satisfaction of financial materiality threshold

A Force Majeure Event must meet a financial materiality threshold, which UT3 defines as “additional incremental costs of greater than \$1million”. These costs must not have been subject to a prior variation of the relevant Reference Tariff.

Whilst the materiality threshold relates to both the incremental impact of both capital and operating and maintenance costs, this application only relates to the operating and maintenance costs incurred as a result of the Flood Event.

As outlined in detail in Section 6 of this application, the incremental operating and maintenance costs associated with Aurizon Network’s response to the Flood Event satisfy the \$1million financial materiality threshold. Therefore, Aurizon Network submits that the Flood Event represents a Force Majeure Event for the purposes of a Review Event under UT3.



## Insurance arrangements

Aurizon Holdings has insurance policies with external providers for specific risk exposures, including public liability, motor vehicle and personal accident.

Aurizon Holdings, on behalf of Aurizon Network, holds an Industrial Special Risk insurance policy. This policy does provide cover for 'Act of God' flooding of the type experienced on the Central Queensland Coal Network (CQCN) in January 2013. It does provide cover for declared assets within the CQCN, but is limited to a number of bridges and electrical feeder stations.

In the past, when assessing the availability and cost of such cover, Aurizon Network has reached the view that the quantum of the deductible and/or the premium which would apply for such cover would render the cost of insurance prohibitive when compared to cost pass-through where Access Holders and their Customers have the capacity to meet those cost pass-through, or via additional 'self-insurance' allowances.

At the time of drafting UT3, there was insufficient historical cost data in relation to flood events to allow an actuary to arrive at a self-insurance estimate. Accordingly Aurizon Networks operating cost allowance and hence the Reference Tariffs included only minor provision for self-insurance for flood damage to the Central Queensland Coal Network which reflected expected losses during benign wet seasons. The amount included in the UT3 operating costs for self-insurance has been materially exceeded by weather-related infrastructure repairs (not related to this flood event) over the course of UT3.

As a result, Aurizon Network has no avenue to recover the costs, except the costs associated with declared assets, associated with the Flood Event other than through the UT3 cost pass-through mechanism.

During the January 2013 floods, damage was sustained to the Neerkol Creek Bridge, located west of Rockhampton on the Backwater system. The bridge is a declared bridge within the Industrial Special Risk Insurance Policy. However due to the nature of the damage to the bridge and the limitations of the policy, Aurizon Network's application to have the damages to the bridge recovered through the insurance program has been rejected.

## Contractual arrangements

UT3 requires Aurizon Network to maintain the Rail Infrastructure in a condition which is fit for purpose. Therefore it has a responsibility to undertake reinstatement works in a quick and efficient manner.

This responsibility is reinforced in clause 18.3 of the Standard Access Agreement which states inter alia that:

*Each Party will use all reasonable diligence to remedy or overcome the effect of the Force Majeure Event as soon as possible and will attempt to identify alternative viable means of providing the Access Rights affected and to mitigate the effect of the Force Majeure Event.*

### 3. Aurizon Network's response to the Flood Event

The Central Queensland Coal Region periodically experiences cyclones and flooding in Summer which can cause extensive damage to the Network. As a consequence, the network has been designed to a specification suitable for tropical environmental conditions. A range of preventative measures have also been taken in areas prone to flooding throughout the system to minimise damage to infrastructure and the safe running of trains.

Aurizon Network also has an established capacity to ensure a coordinated response to these events that ensures safety at all times and the timely restoration of the network .

The Flood Event resulted in extensive damage to the Moura and Blackwater (including the North Coast Line) systems, Due to the nature of the flooding and the locations of the flooding the damage to the network has been categorised for costing purposes as:

- Ballast;
- Labour (both ordinary and overtime)
- Consumables;
- Resurfacing;
- Inventory; and
- Overheads

These costs are further expanded upon within section 6 of this submission.

The January 2013 Flood Event, was responded to under the Aurizon Network Disaster response plan. Supporting elements to the disaster response plan include operational practices controlled by the Asset Management, Asset Maintenance, Engineering and Project Delivery, Specialised Track Services and Construction Services teams.

These operational practices (outlined in Figure 3) include:

- Review event resulting in a Force Majeure (FM) declaration on affected systems;
- Track inspection completed by Track Inspector or Engineer to confirm access and assess damage;
- Client Requirement Brief (CRB) – Document created by either Track Inspector or Engineer outlining the scope of works required to repair the track. The CRB may contain multiple stages of repair work, and the track may be open between repair stages with speed restrictions in-place; and
- Inspection Test Plan (ITP) – Engineer or Track Inspector Sign-off of the completed works.

Figure 3 – Aurizon Network – Repair work process



\* Repair work may include multiple stages.

## Examples of Infrastructure Damage



Kabra Warren – CL6



Aroona – CL 10



Stirrat – Clarke – MSL 7



Mt Rainbow – MSL 15



40ft Container under bridge



Duringa on 29/01/2013



## 4. Approved maintenance cost allowance

The UT3 Provisions set out the form of regulation to apply to coal-carrying train services on the CQCN. The incremental costs associated with the response to the Flood Event will need to be recovered in accordance with the UT3 Provisions.

In this regard, the QCA has approved Aurizon Network's maintenance cost allowances for the current regulatory period, including 2012/13 when the Review Event occurred.

The AT<sub>1</sub> Reference Tariff component (the incremental maintenance charge) represents how current utilisation of the network by train services will incrementally affect the required maintenance of the track infrastructure over its useful life. This tariff component is excluded from the revenue cap control applied to Aurizon Network's coal-carrying train services under the 2010 Access Undertaking and is not considered as part of this submission.

The System Allowable Revenue which is comprised of the AT<sub>2-4</sub> Reference Tariff components consists of the residual revenue that Aurizon Network is entitled to earn from the use of the non-electrified sections of its network. While it is represented and defined as revenue from AT<sub>2-4</sub>, it should include the efficient operating and maintenance costs that Aurizon Network does not recover from AT<sub>1</sub>.

As a result of the significant maintenance work undertaken in response to the Review Event, Aurizon Network has incurred incremental costs in excess of the QCA-approved maintenance cost allowance. These costs will not be recoverable through variations to the AT<sub>1</sub> Reference Tariff component in the 2012/13 Reference Tariffs or 2013/14 Transitional Reference Tariffs in the absence of this cost pass-through application being approved.

As noted in section 2 of this application, in the context of a cost pass-through application under UT3, the impact of a Force Majeure event must result in Aurizon Network incurring additional incremental costs that must not have previously resulted in a variation of the relevant Reference Tariff. This condition is satisfied in relation to this pass-through application.

The next two chapters of this submission discuss the incremental cost estimate associated with Aurizon Network's response to the Flood Event.

## 5. Aurizon Network's approach to identifying incremental Flood Event costs

### Introduction

The process for capturing costs incurred by Aurizon Network in responding to the Flood Event has been reviewed, by Deloitte Touche Tohmatsu (Deloitte) to ensure that costs:

- Can be specifically attributed to Aurizon Network's response in the Central Queensland Coal Network used for the purpose of coal-carrying services;
- Excludes all capital expenditure-related costs associated with the response to the Flood Event; and
- Excludes any costs which would be claimable under the Industrial Specific Policy held by Aurizon Holdings

Additionally, the QCA engaged Sinclair Knight Mertz (SKM) to complete a cost repair estimate for the costs associated with entire flood event. Specifically, SKM were engaged to undertake the following:

- Provide a written summary report describing the damage and giving a preliminary estimate of the likely cost of repairing the network, drawing on benchmarks and the consultant's knowledge of similar projects. This report will also critique any early cost estimates provided by Aurizon Network, if they are available.

As part of SKM's engagement, 19 sites were selected to establish an estimate costs for the repair works for those sites. To ensure a high degree of consistency, the Deloitte review incorporated these 19 sites as part of their consultancy.

## Methodology to identify incremental costs

The approach adopted in preparing this cost pass-through application is that only incremental costs associated with Aurizon Network's response to the Flood Event have been claimed. To achieve this, Aurizon Network has excluded all asset renewal and replacement costs, which will be subject to the QCA's 'ex post' capital expenditure approval process under UT3.

Consistent with the methodology previously applied by the QCA for UT3, Aurizon Network has excluded all internal margins where work is performed by an entity which is related to it, other than the 5.75% margin applied to direct labour costs (see below). The UT3 maintenance allowance included no explicit provision for working capital or corporate overhead allocations. Accordingly, Aurizon Network has applied the 5.75% margin to direct labour costs associated with the flood event and included it in this claim to ensure consistency with the QCA's position on the approved UT3 maintenance cost allowances.

Aurizon Network incurred additional incremental business and overhead costs as a result of the Flood Event. These costs include:

- Senior management, Engineering expertise and Administrative support involved in activating and coordinating the flood recovery taskforces;
- Project Managers and Engineering resources to develop the recovery plan including the Client Requirement Briefs (CRB); and
- Co-ordination of additional contractor and internal resources.

## Capture of repair costs

Flood-related costs were captured at the work order level, which were created in the finance system based on the location of the works undertaken as part of the Flood Event remediation process. Work orders incorporate a description of the nature of the activity undertaken and the location i.e. relevant line section. These costs were booked against line sections of the network detailed by a unique identifier contained within the applicable CRB.

## Adjustments for costs already funded under UT3

Consistent with Aurizon Network's capitalisation policy, where replacements of network assets relate to minor items of plant or immaterial components of larger assets, these items are expensed not capitalised.

Replacement of these minor assets has been reviewed against replacement programs approved as part of UT3 to ascertain those replacements that should be deemed non-incremental and excluded from the pass-through application.

As a result of the flood rectification works, Aurizon Network may have been relieved of its obligation to undertake a number of maintenance activities which either were funded under UT3 or will make other planned maintenance activities in UT3 avoidable. Aurizon Network has reviewed and analysed its maintenance expenditure incurred during the Flood Event to determine whether there are any components that have already been funded as part of UT3. The outcomes of this review are discussed in the following sub-sections.

### Renewals maintenance program

Aurizon Network's flood response had minimal immediate impact on capital renewal as the scope and locations of future renewals did not coincide with the flood damage sites.

Moreover, any capital renewals entailing infrastructure upgrades will be dealt with through the UT3 capital approval process.

### Civil maintenance programs

The maintenance program service most likely to be affected by Aurizon Network's flood response is civil maintenance, in particular, track structure management. The largest items within this program are ballast cleaning and mechanised resurfacing.

The primary intention of Aurizon Network's flood response was to restore track to its pre-flood standard not to a higher standard. As a result, there are no expected changes, and in particular, reductions in the scope of the existing programs over the remainder of UT3. As a result, there are no expected cost savings in these programs as a result of the flood response.

## Future asset inspection and maintenance programs

Due to the emergency nature of the Flood Event, the inspection and maintenance performed during the flood response was by necessity very narrow in scope with the primary purpose being safe restoration of coal-carrying train services. As a consequence, there is little or no expected favourable impact on future programmed or condition-based inspection and maintenance programs that are more extensive in scope than provided for in UT3.

As a result of inundation, Aurizon Network is faced with the uncertainty of the medium to longer term impact on network assets. There is the potential for increased corrective maintenance requirements in the remainder of this and future regulatory periods. Examples of possible longer term maintenance issues on the network include:

- Extraneous requirements for spot tampering to repair localised formation failure;
- Higher faults encountered in signalling equipment that was immersed; and
- Higher general track maintenance in the months following the floods including vegetation management, drainage cleaning and repair and turnout maintenance.

Any or all of these effects are likely to lead to accelerated replacement, repair or operational issues in coming years. However, within this submission, Aurizon Network has included un-incurred costs for some of these immediately foreseeable impacts while medium and longer term activities have been excluded.



## 6. Incremental maintenance cost estimates

### Introduction

This section details the incremental costs incurred by Aurizon Network in repairing damage created as a result of the flooding in the CQCN.

The total incremental costs for each of the Blackwater and Moura systems are as follows:

- Blackwater - \$10,964,033 (including North Coast Line); and
- Moura - \$6,193,142.

The cost attributable to the North Coast Line are in sections that are owned by Aurizon Network and utilised by Blackwater system users.

The following table summarises the total maintenance expenditure by major cost categories that was incurred by Aurizon Network for each system in responding to the Flood Event. The maintenance activities undertaken during the flood response were on a corrective (as opposed to preventative) basis.

**Table 2 - Total maintenance costs by system**

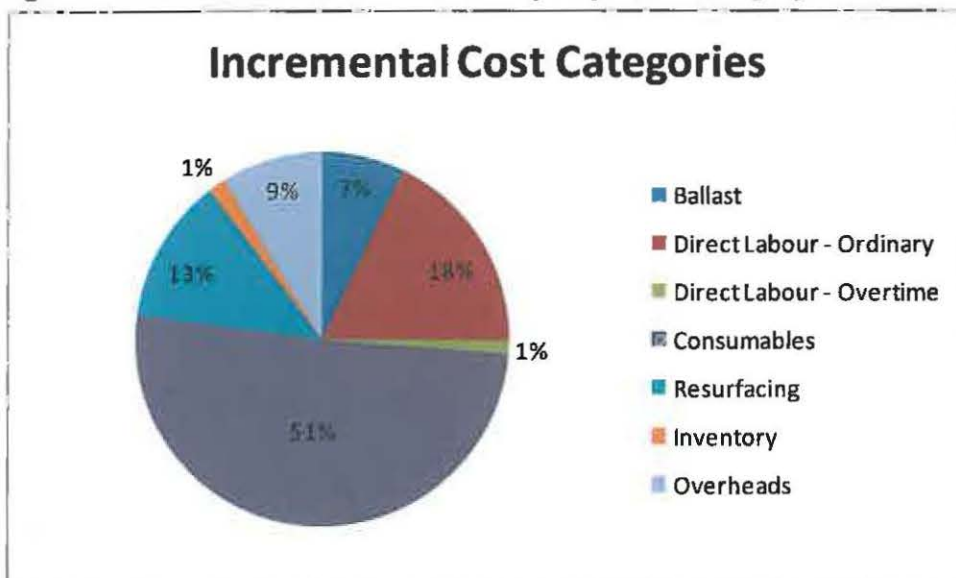
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These incremental costs include:

- Actual Costs incurred in the period between January 2013 and June 2013; and
- Estimated costs for works that have been planned as part of the flood rectification works that will be delivered in the near future. It is estimated that these works will cost \$4,251,000.

Figure 4 illustrates the breakdown of incremental costs on a per category basis.

**Figure 4 Incremental maintenance costs by major cost category**



The following sub-sections discuss in more detail the nature of the costs incurred in the flood response.

## Ballast

The most significant consumable item was ballast. It was required to replace ballast that was washed away or was not suitable to be reused. There are ballast stockpiles at various points in the coal systems and these were drawn upon where possible. However, the flooding sometimes prevented easy access to the existing stockpiles (due to track and road closures), so additional ballast purchases were made from external sources. These additional supplies were made under existing contractual arrangements and copies of the invoices are available if required.

## Labour

Due to the evolving nature of the Flood Event, Aurizon Network's response was extremely labour intensive not only requiring the assignment of the majority of internal labour field resources to the flood affected areas but also making extensive use of contract labour. The use of internal labour resources was managed in compliance with Aurizon Network's safety and fatigue management policies.

The majority of labour services were provided by Aurizon Network Maintenance and Specialised Track Service functions. Internal labour used during the flood has been costed based on Aurizon's standard labour costing processes.

Significant overtime was required of existing Aurizon Network staff to repair damage to the track and associated infrastructure to make it safe for coal-carrying services to re-commence as soon as possible. This overtime includes additional track inspections on top of the normal 72 hour track inspection cycle. Additional track inspections throughout the affected systems, were carried out until May 2013 due to the particular flood damage (e.g. Mud holes and saturated foundations) not being evident immediately post flood water receding.

## Consumables and Inventory

Responding to the Flood Event required a range of consumables/materials. Inventory primarily represents Aurizon Network's store issues of minor items of plant, equipment and tools used by field staff in repairing track and associated infrastructure and cleaning up after the flood waters receded. Purchases of equipment or materials not readily available from stores were purchased directly from suppliers due to the urgency of the requirement.

### External Contractors

Aurizon Network manages a significant proportion of its contractor engagement through formal procurement arrangements. Under these arrangements, Aurizon Network engages in market-based tendering and assessment of contractors to establish long term flexible and lowest supply chain cost contracts. The majority of contractor expenditure incurred during the flood was with contractors covered by these arrangements.

Due to the time critical and safety-focussed nature of Aurizon Network's emergency response, the remaining contract expenditure was incurred on an 'as needed' basis with, where practicable, invoices reviewed for reasonableness prior to payment.

The most significant item of contractor spend was labour and plant hire costs, which reflect the cost of hiring excavators, bobcats, graders, and dump trucks. This hiring was necessary due to the scale of the flooding and because of the access difficulties caused by closed access roads and rail line sections. In general, external plant hire was undertaken close to the site of flood damage. All costs are supported by invoices and are judged to be reasonable.

## Resurfacing

This cost category includes wet hire of plant and machinery associated with the resurfacing activities as a result of the flood. Given the serious nature of the flood damage to track infrastructure, Aurizon Network made heavy use of track machines in the restoration task.

Mechanised resurfacing is a standard railway maintenance function applied to keep track within the design geometry parameters. It assures correct levelling and lining, which keeps vertical and lateral forces and accelerations within acceptable limits. As a result of large sections of ballast having to be replaced resurfacing of the affected track was required. Resurfacing restores the geometry of the track by lifting it to the appropriate level and compacting the ballast underneath the sleeper. If track geometry is not corrected to a standard fit for the traffic task, track components deteriorate leading to a marked increase in the need to perform other maintenance on the track. Examples of deterioration include:

- Rails developing surface irregularities and defects;
- Fastenings may work loose or break;
- Sleepers may skew or even break; and
- Ballast and formation deteriorates.

## Other costs

These costs have been captured under the Consumable heading and are a range of individual cost items incurred in undertaking the flood response, including accommodation and meals for field staff, medical and hygiene supplies, and stationary.

The accommodation and meals costs reflect the transfer of large numbers of staff to the affected line sections from within the affected system's region and other regions. Medical and hygiene costs related to the difficult and dangerous conditions in which the flood response occurred.

Aurizon Network has also included external consultancy costs used in preparing this claim, including an audit of the flood cost capture process.



## 7. Revenue and price impacts

### Flood Event incremental cost estimates

As indicated above, the incremental cost estimates associated with the Review Event is \$17,157,174 (in 2012/13 \$) spread across the Blackwater and Moura systems as outlined within Table 2. The costs attributable to the North Coast Line are in sections owned by Aurizon Network and utilised by Blackwater system users.

In accordance with the UT3 Provisions Aurizon Network nominates the Blackwater and Moura Transitional Reference Tariffs to recover the incremental costs associated with the Review Event.

This section details the methodology used to vary the respective Transitional Reference Tariffs and System Premiums, including the timing of those variations.

### Approved System Allowable Revenues and Reference Tariffs

The approved System Allowable Revenues for the 2013/14 year (as per the Transitional Tariff proposal) inclusive of approved Revenue Cap Adjustment Amounts (RCAA) are detailed in Table 3.

Table 3 - Approved System Allowable Revenues for 2013/14

	SAR AT <sub>2,4</sub>	RCAA	Adjusted SAR
Blackwater	207,847,724	7,306,072	215,153,796
Moura	36,566,933	(5,157,695)	31,409,238

The nominated Transitional Reference Tariffs to be varied by this Review Event are detailed in Table 4. The Review Event's Revenue Adjustment Amounts will need to cover the AT<sub>2,4</sub> Reference Tariff components for the Blackwater and Moura systems.

Table 4 - Published 2013/14 Reference Tariffs and System Premiums

	AT <sub>1</sub>	AT <sub>2</sub>	AT <sub>3</sub>	AT <sub>4</sub>
Blackwater System Price	0.86	2,019.37	4.36	1.52
Rolleston System Premium	-	-	2.34	-
Minerva System Premium	-	-	2.06	-
Moura System Price	1.60	604.88	6.12	1.03

### Revised System Allowable Revenues

Aurizon Network considers that based on the materiality of the total Flood Event claim relative to the size of the relevant System Allowable Revenue and the scale of under-recovery of the AT<sub>1</sub> for the 2012/13 year it is not unreasonable for Aurizon Network to recover the full amount of the claim through variations to Transitional Reference Tariffs for the 2013/14 financial year.

It is proposed that the variation to the relevant Transitional Reference Tariffs be retrospectively applied from 1 July 2013.

As the costs were incurred in 2012/13 and will not be recovered until the 2013/14 year, Aurizon Network proposes to escalate the proposed Flood Event Costs of \$17.2 million by a full year CPI adjustment. The most recent Reserve Bank Statement of Monetary Policy forecasts the year end inflation estimate for December 2013 to be between 2.3% and 2.5%. Escalation increases the costs to be recovered to \$18,229,265.

The revised System Allowable Revenue for 2013/14 associated with the variation to the nominated Transitional Reference Tariffs is shown in Table 5.

**Table 5 - Revised System Allowable Revenue for 2013/14**

	SAR AT <sub>2,4</sub>	RCAA	Flood Event	Revised SAR AT <sub>2,4</sub>
Blackwater	207,847,724	7,306,072	11,619,113	226,772,909
Moura	36,566,933	(5,157,695)	6,610,152	38,019,390

For the avoidance of any doubt, it is intended that the costs associated with the Review Event be recovered in addition to the transitional allowable revenue for 2013/14, i.e. \$722m exclusive of 2011/12 revenue cap; \$739 inclusive of 2011/12 revenue cap.

## Variation to Nominated Reference Tariffs

Aurizon Network also considers the most effective means of recovering the costs is to increase the AT<sub>3</sub> component of the relevant Transitional Reference Tariffs.

The amendment to the relevant Transitional Reference Tariff components will be determined having regard to the approved System Forecasts for 2013/14 to ensure the variation is calculated as if all other Transitional Reference Tariffs were being recalculated due to the occurrence causing the Review Event (as require under Clause 2.2.7(c)(iii)). The relevant System Forecasts are detailed in Table 6.

**Table 6 - System Forecasts for the 2013/14 year**

System	Net tonne kilometres
Blackwater Total	20,531,404
Moura Total	2,267,943

The resultant change in the nominated Transitional Reference Tariff is shown in Table 7.

**Table 7 - Variations to 2013/14 Reference Tariffs**

	AT <sub>1</sub>	AT <sub>2</sub>	AT <sub>3</sub>	AT <sub>4</sub>
Blackwater System Price	-	-	0.566	-
Moura System Price	-	-	2.915	-

The revised Transitional Reference Tariffs and System Premiums arising from this Review Event effective from 1 July 2013 are shown in Table 8.

**Table 8 Revised 2013/14 Reference Tariffs and System Premiums**

	AT <sub>1</sub>	AT <sub>2</sub>	AT <sub>3</sub>	AT <sub>4</sub>
Blackwater System Price	0.86	2,019.37	4.93	1.52
Rolleston System Premium	-	-	2.34	-
Minerva System Premium	-	-	2.06	-
Moura System Price	1.60	604.88	9.03	1.03

# Appendix 1

