

GTAC – Wash-up Discussion Paper

1. Introduction

1.1 At GTAC Workshop Block 1 (on 12 July 2018), the following points in relation to wash-ups were discussed:

- (a) that transitional arrangements need to be considered in order to determine the opening GTAC Running Mismatch positions on 1 October 2019;
- (b) that transitional arrangements will be required in respect of wash-ups in relation to the period prior to 30 September 2019 that result in adjustments after that date; and
- (c) that a replacement of Schedule 3 to the MBB D+1 Pilot Agreement (**MBB Agreement**) is required to form the proposed Wash-Up Agreement referred to in the current draft GTAC to provide for wash-ups in relation to the period on and from 1 October 2019.

1.2 This document:

- (a) sets out, in section 3, the proposed transitional arrangements referred to in paragraphs 1.1(a) and 1.1(b) above (which First Gas proposes are set out in a new transitional arrangements schedule to be added to the GTAC (**New Transitional Arrangements Schedule**));
- (b) sets out, in section 2, a table which identifies the relevant concepts in the provisions set out in Schedule 1 and Schedule 2 of the MBB Agreement with ongoing applicability, and indicates where those concepts have already been reflected in the current draft GTAC; and
- (c) sets out, in the attachment to this document, the proposed replacement provisions of Schedule 3 to the MBB Agreement to provide for wash-ups in relation to the period on and from 1 October 2019 as separately provided by Vector, with First Gas' proposed amendments showing in tracked changes. First Gas proposes these are attached as a new wash-up schedule to the GTAC (rather than being a standalone Wash-up Agreement) (the **New Wash-up Schedule**). First Gas has also identified in section 4 relevant provisions from the MBB Agreement to be included in the New Wash-up Schedule.

1.3 Capitalised terms used in this document have the meaning given to them in the VTC, MPOC, draft GTAC or MBB Agreement (as applicable).

2. Relevant MBB Agreement concepts included in draft GTAC

2.1 As noted at paragraph 1.2(b) above, First Gas considers that the relevant concepts in the provisions set out in Schedule 1 and Schedule 2 of the MBB Agreement with ongoing applicability (and which need to be reflected in the GTAC), have been reflected in the current draft GTAC as follows:

MBB Agreement Provision	Equivalent GTAC Provision
<i>Schedule 1 (Daily Calculations)</i>	
Para 1.1	Schedule 2 (see reference to 8.15)
Para 1.2	Running Mismatch definition
Para 1.3	6.11(b)

MBB Agreement Provision	Equivalent GTAC Provision
Para 1.4	Schedule 2 (see reference to 8.15)
Para 1.5	N/A
Para 2.1(a)	Section 8.8 (negative Running Mismatch)
Para 2.1(b)	Section 8.9 (Balancing Gas credits)
Para 2.1(c)	Sections 8.8 and 8.9 (First Gas Running Mismatch)
Para 2.1(d)	Incorporated in Running Mismatch definition
Schedule 2	
Para 1.1(a)	Section 11.21(a) (Non-Transmission Services Invoice; but calculation of actual figure is in sections 8.8 and 8.9)
Para 1.1(b)	Section 11.21(a) (Non-Transmission Services Invoice; but calculation of actual figure is in sections 8.8 and 8.9)
Para 1.1(c)	Section 8.8
Para 1.1(d)	Section 8.9

3. **Proposed Transitional Arrangements – New Transitional Arrangements Schedule**

- 3.1 First Gas proposes that the New Transitional Arrangements Schedule be added to the GTAC to give effect to the following.

Part A – Transfer of VTC Running Mismatch positions and MPOC aggregated Running Operational Imbalance positions; cash-outs above tolerance levels

- 3.2 First Gas proposes that:

- (a) First Gas' and each Shipper's Closing Position under the VTC as at 2400 hours on 30 September 2019 becomes its opening Running Mismatch position under the GTAC on 1 October 2019;
- (b) First Gas' and each Shipper's aggregated Running Operational Imbalance for all relevant Welded Points under the MPOC as at 2400 hours on 30 September 2019 becomes its opening Running Mismatch position under the GTAC on 1 October 2019 (and added to/subtracted from the VTC balance if necessary);
- (c) any imbalance positions under the MPOC above the Running Operational Imbalance Limit as at 30 September 2019 would be cashed out at the Average Market Price as at 30 September 2019; and
- (d) if and to the extent 30 September 2019 is a BPP Allocation Day under the VTC, Balancing Gas will be bought and sold as provided in clauses 8.18 and 8.19 of the VTC.

Part B – New Transitional Arrangements Schedule

- 3.3 First Gas proposes that the New Transitional Arrangements Schedule provides for the following:
- (a) recognition that the New Wash-up Schedule applies in respect of wash-ups in relation to the period on and from 1 October 2019;
 - (b) First Gas and each Shipper will use its reasonable endeavours to run each of its:
 - (i) Closing Position under the VTC; and

- (ii) aggregated Running Operational Imbalance for all relevant Welded Points under the MPOC,

to zero as at 2400 hours on 30 September 2019;

- (c) the MBB Agreement will terminate at 2400 hours on 30 September 2019, however, all provisions of the MBB Agreement will continue to bind the parties in respect of wash-ups in relation to the period prior to 30 September 2019 for so long as is necessary to give effect to the parties' respective rights and obligations under each of the MBB Agreement, the VTC and the MPOC in respect of wash-ups in relation to the period prior to 30 September 2019 (in particular, as set out in Schedule 3 of the MBB Agreement), except to the extent expressly varied by the New Transitional Arrangements Schedule, as follows:
 - (i) notwithstanding clause 5.4(b)(i) of the MBB Agreement, First Gas will continue wash-up calculations for Interim Allocations, Final Allocations and Special Allocations in relation to the period prior to 30 September 2019 issued during the 26 months (rather than the four months) following 30 September 2019 in accordance with Schedule 3 of the MBB Agreement;
 - (ii) the invoicing and payment provisions under the GTAC will apply to give effect to any adjustments as a consequence of the wash-up calculations under paragraph 3.3(c)(i) above, rather than the invoicing and payment provisions of the VTC and MPOC;
 - (iii) the concepts set out in paragraph 3.2 above will be reflected in the New Transitional Arrangements Schedule so that the Closing Position (as adjusted by the MPOC aggregated Running Operational Imbalance for all relevant Welded Points under paragraph 3.2(b)) for First Gas and each Shipper on 30 September 2019 will be the opening Running Mismatch position under the GTAC on 1 October 2019 (as also contemplated by clause 5.4(b)(iii) of the MBB Agreement) and any imbalance positions above the relevant tolerance levels under the VTC and the MPOC will be cashed out as at 30 September 2019; and
 - (iv) notwithstanding clause 5.2(c) of the MBB Agreement, the D+1 Pilot continues to apply (to the New Transitional Arrangements Schedule and New Wash-up Schedule) and will not come to an immediate end as at 30 September 2019;
- (d) as referred to in clause 5.4(b)(ii) of the MBB Agreement, First Gas and each Shipper's Residual Imbalance calculated during September 2019 will be spread evenly over October 2019;
- (e) without limiting paragraph 3.3(c) above, the termination of the MBB Agreement will be without prejudice to the accrued rights or claims of any party in relation to any act or omission of the parties prior to 30 September 2019 (*see clause 5.1(b) of the MBB Agreement*);
- (f) without limiting paragraph 3.3(c) above, the termination of the MBB Agreement will not (except to the extent expressly varied by the New Transitional Arrangements Schedule as set out in paragraph 3.3(c) above):
 - (i) relieve any party of its obligation to pay any money outstanding under the MBB Agreement together with the VTC as at 30 September 2019 (*see clause 5.4(c)(i) of the MBB Agreement*);

- (ii) relieve any Shipper of its obligation to settle a Running Mismatch in accordance with the MBB Agreement in relation to the period prior to 30 September 2019 (*see clause 5.4(c)(ii) of the MBB Agreement*); or
 - (iii) relieve any Shipper of any obligation to settle a Running Mismatch in accordance with the Code in relation to the period prior to 30 September 2019 (*see clause 5.4(c)(iii) of the MBB Agreement*);
- (g) First Gas and each Shipper acknowledge that First Gas and the GIC will amend the D+1 Data Agreement (referred to in section 6.11(a) of the draft GTAC as the “industry agreement”) to ensure the D+1 allocations continue in accordance with the GTAC (including the New Wash-up Schedule and the New Transitional Arrangements Schedule);
- (h) First Gas, each Shipper and each Interconnected Party agree that if and to the extent the New Transitional Arrangements Schedule constitutes an amendment to the VTC or change to the MPOC, then the requirements of section 25 of the VTC and section 29 of the MPOC are hereby deemed by each of the parties to be satisfied;
- (i) the parties agree that First Gas may, at its discretion and acting as a Reasonable and Prudent Operator, raise a Change Request Notification or Change Request under the VTC or MPOC (respectively) to give a more proper or more fulsome effect to the provisions of the New Transitional Arrangements Schedule;
- (j) First Gas and each Shipper agree that if and to the extent it is not possible for whatever reason for the Closing Position (as adjusted by the MPOC aggregated Running Operational Imbalance for all relevant Welded Points under paragraph 3.2(b)) for First Gas and each Shipper on 30 September 2019 to be the opening Running Mismatch position under the GTAC on 1 October 2019, then First Gas’ and each Shipper’s Closing Position will be cashed-out at the Cash-out Buy Price or Cash-out Sell Price as determined in accordance with Schedule 2 of the MBB Agreement, and the opening Running Mismatch position for FG and each Shipper under the GTAC on 1 October 2019 will be zero; and
- (k) First Gas will apply the provisions of the New Transitional Arrangements Schedule in a manner and with a view to having as close an economic effect to the arrangements agreed by the parties (pursuant to the MBB Agreement, VTC and MPOC) prior to the Commencement Date of the GTAC as is possible.

4. **New Wash-up Schedule**

- 4.1 First Gas proposes that the New Wash-Up Schedule include the proposed replacement provisions of Schedule 3 to the MBB Agreement attached to this document, and also provide for the following:
 - (a) the proposed New Wash-up Schedule will apply in respect of wash-ups in relation to the period on and from 1 October 2019;
 - (b) as referred to in paragraph 3.3(c)(iv) above, notwithstanding clause 5.2(c) of the MBB Agreement, the D+1 Pilot continues to apply to the New Wash-up Schedule and will not come to an immediate end as at 30 September 2019;
 - (c) each Shipper and OBA Party will use all reasonable endeavours to comply with the GIC’s business rules for the D+1 Pilot published from time to time on the GIC’s website (*see clause 3.1(c) of the MBB Agreement*);

- (d) nothing in the New Wash-up Schedule will oblige First Gas to do, or not do, anything that may (in First Gas' opinion) cause First Gas to be non-compliant with any applicable law or operate otherwise than as a Reasonable and Prudent Operator (see *clause 3.2(a) of the MBB Agreement*);
- (e) each Shipper and OBA Party acknowledge that First Gas will determine "initial" Daily Delivery Quantities in accordance with *section 6.11* (note that *section 6.11* means there is no need for the New Wash-up Schedule to include an acknowledgement regarding First Gas' ability to perform its obligations as per *clause 3.2(b) of the MBB Agreement*);
- (f) each Shipper acknowledges and agrees that First Gas does not make any representations or warranties that any data used or calculated by First Gas in performing its obligations under the New Wash-up Schedule and sections 8.8 and 8.9 of the GTAC, or otherwise made available to Shippers by First Gas in connection with the GTAC (the **D+1 Data**), is reliable, accurate or complete. First Gas is not liable for any loss resulting from any action taken by a Shipper or reliance made by a Shipper on any D+1 Data (see *clause 3.4 of the MBB Agreement*);
- (g) any Shipper or OBA Party may give notice to First Gas requiring the appointment of an independent auditor to review the processes under the New Wash-up Schedule and sections 8.8 and 8.9 of the GTAC (see *clause 3.5 of the MBB Agreement (please note that the process provisions in clause 3.5 of the MBB Agreement will be included in full)*); and
- (h) each Shipper and OBA Party will defend, hold harmless and indemnify First Gas for any liability suffered or incurred as a result of a claim made by any customer of that Shipper, OBA Party or a third party in connection with the D+1 Data, the New Wash-up Schedule or sections 8.8 or 8.9 of the GTAC, with a specified process to be followed (see *clauses 4.2, 4.3 and 4.5 of the MBB Agreement*).

Attachment: New Wash-up Schedule (MBB Agreement Schedule 3 replacement provisions)

Schedule X: BALANCING WASH-UP CALCULATIONS

1 REQUIREMENT

- 1.1 The Running Mismatch for each Shipper, OBA Party and First Gas is likely to require adjustments ("~~w~~**Wash-ups**") when changes are required to:
- (a) Daily Delivery Quantities determined by the Allocation Agent; and/or
 - (b) corrections required for Metering errors or miscalculation of energy quantities and/or
 - (c) to Receipt Quantities determined by the Gas Transfer Agent.
- 1.2 Following the release of the Interim [Allocation](#), Final [Allocation](#) or any Special Allocation ([each as defined in the Downstream Reconciliation Rules](#)) during ~~the a m~~Month, First Gas will calculate the ~~w~~**Wash** ups as required which will be applied to each Shipper's, OBA Party's and First Gas' opening ~~R~~Running ~~m~~Mismatch position on the first [Day](#) of the ~~m~~Month following receipt of the revised [Interim Allocation](#), [Final Allocation](#) or [Special Allocation \(as applicable\)](#).
- 1.3 Adjustments will be applied as set out in this Schedule X.

2 RUNNING MISMATCH WASH-UPS

2.1 Requirement

On or before ~~the 16th b~~Business ~~d~~Day of ~~the each m~~Month or as required, First Gas will calculate, for each Day in the Month, that requires a ~~w~~**Wash**-up, the changed Running Mismatch for each Shipper, OBA Party and First Gas.

2.2 Shipper Running Mismatch Wash-up Calculation

A Shipper's changed Running Mismatch (RM_n) is initially defined as:

$$RM_n = RM_{d-1} + (R_n - D_n) + ATQ_n + WU$$

where:

RM_{d-1} is the Shipper's initial published Running Mismatch for the previous Day, calculated [as in accordance with section per 1.1](#) of the GTAC;

R_n is the Shipper's most recently calculated Receipt Quantity for that Day;

D_n is the Shipper's most recently calculated Delivery Quantity for that Day;

ATQ_n is the Shipper's the most recently calculated Aggregate Trade Quantity for that Day; and

WU is the Shipper's previously calculated Wash-~~up-Up~~ quantity for the ~~m~~Month.

2.3 First Gas Running Mismatch Wash-up Calculation

First Gas' changed Running Mismatch (RM_n) for a Day is defined as:

$$RM_n = RM_{d-1} + (R_n - D_n) + ATQ_n + WU$$

where:

RM_{d-1} is First Gas' initial published Running Mismatch for the previous Day, calculated [as-in accordance with sectionper 1.1](#) of the GTAC;

R_n is First Gas' most recently calculated quantity of Gas purchased by First Gas for that Day;

D_n is First Gas' most recently calculated quantity of Gas sold by First Gas or consumed by equipment such as compressors, line heaters for that Day;

ATQ_n is First Gas' the most recently calculated Aggregate Trade Quantity for that Day; and

WU is First Gas' previously calculated Wash-up quantity for the [Month](#).

2.4 Delivery Point OBA Party Running Mismatch Wash-up Calculation

A Delivery Point OBA Party's changed Running Mismatch (RM_n) for a Day is defined as:

$$RM_n = RM_{d-1} + (N_n - DQ_n) + ATQ_n + WU$$

where:

RM_{d-1} is the OBA Party's initial published Running Mismatch for the previous Day, calculated [as-in accordance with sectionper 1.1](#) of the GTAC;

N_n is the most recently calculated total approved nominations for the applicable Delivery Point and that Day;

DQ_n is the most recently calculated metered quantity for the applicable Delivery Point and that Day;

ATQ_n is the OBA Party's most recently calculated Aggregate Trade Quantity for that Day; and

WU is the OBA's previously calculated Wash-up quantity for the [Month](#).

2.5 Receipt Point OBA Party Running Mismatch Wash-up Calculation

A Receipt Point OBA Party's changed Running Mismatch (RM_n) for a Day is defined as:

$$RM_n = RM_{d-1} + (RQ_n - N_n) + ATQ_n + WU$$

where:

RM_{d-1} is the OBA Party's initial published Running Mismatch for the previous Day, calculated [as-in accordance with sectionper 1.1](#) of the GTAC;

RQ_n is the most recently calculated metered quantity for the applicable Receipt Point and that Day;

N_n is the most recently calculated total approved nominations for the applicable Receipt Point and that Day;

ATQ_n is the OBA Party's most recently calculated Aggregate Trade Quantity for that Day; and

WU is the OBA's previously calculated Wash-up quantity for the Month;

3 BALANCING GAS ALLOCATION WASH-UP

3.1 Requirement

Following the calculation of Running Mismatch Wash-ups in paragraph 2 of Schedule X, clause 2, First Gas will calculate, for each Day in the Month, the changed Balancing Gas allocation for each Shipper, OBA Party and First Gas.

3.2 Balancing Gas purchased

If for a Day, First Gas has purchased Balancing Gas (PG_n), then the allocated Wash-up quantity of that Balancing Gas for each Shipper and OBA Party (BGP_n) is:

(a) If PG_n is greater than $NRM_{ALL, wu-1}$, then:

$$BGP_n = -1 \times NRM_{wu-}$$

(b) If PG_n is less than $NRM_{ALL, wu-1}$, then:

$$BGP_n = PG_n \times \frac{NRM_{wu-1}}{NRM_{ALL, wu-1}}$$

where:

NRM_{wu-1} is the Party or OBA Party's most recently calculated Running Mismatch for the previous Day, as calculated in accordance with paragraph 2 of Schedule X, clause 2, if that value is less than zero; and

$NRM_{ALL, wu-1}$ is the sum of all NRM_{wu-1} for all Parties and OBA Parties;

3.3 Balancing Gas sold by Shippers and OBA Parties

If for a Day, First Gas has sold Balancing Gas (SG_n), then the allocated wash-up quantity of that Balancing Gas for each Shipper and OBA Party (BGS_n) is:

(a) If SG_n is greater than $PRM_{ALL, wu-1}$, then:

$$BGS_n = PRM_{wu-1}$$

(b) If SG_n is less than $PRM_{ALL, wu-1}$, then:

$$BGS_n = SG_n \times \frac{PRM_{wu-1}}{PRM_{ALL, wu-1}}$$

where:

PRM_{wu-1} is the Party or OBA Party's most recently calculated Running Mismatch for the previous Day, as calculated in accordance with paragraph 2 of Schedule X, clause 2, if that value is greater than zero; and

$PRM_{ALL, wu-1}$ is the sum of all PRM_{wu-1} for all Parties and OBA Parties;

4 CALCULATION AND APPLICATION OF WASH-UP QUANTITIES

4.1 Requirement

First Gas will calculate the difference between the Running Mismatch calculated in [accordance with paragraph 2 of Schedule X, clause 2](#) and the previously calculated Running Mismatch. The difference will be returned to Shippers, OBA Parties and First Gas as an adjustment to Running Mismatch in the next ~~month~~ month after the calculation has been performed.

4.2 Months after Commencement Date

For each Shipper, OBA Party and First Gas, First Gas will calculate the applied ~~w~~Wash-up quantity (WU), which is the sum of the ~~w~~Wash-up quantities of prior Days (WU_A) divided by the Days of the Month after the Day of calculation (M). WU will be applied to each Day of the Month following the Month that these calculations take place.

(a) WU_A for a Day is:

$$WU_A = RM_n - RM_{n-1}$$

where:

RM_n has the meaning set out in paragraph 2.2 [of Schedule X](#) for Shippers, [Schedule X, clause-paragraph 2.3 of Schedule X](#) for First Gas, [paragraph clause 2.4 of Schedule X](#) for Delivery Point OBA Parties and [paragraph 2.5 of Schedule X, clause 2.5](#) for Receipt Point OBA Parties; and

RM_{n-1} is the previous calculated Running Mismatch for the relevant Day.

(b) WU is:

$$WU = \frac{\sum_{i=1}^x WU_A}{M}$$

where:

x is the count of prior Days that have had a change to variables that make up Running Mismatch; and

M is the number of days in the Month following the Month in which WU is calculated.

5 FINAL REVISED RUNNING MISMATCH

5.1 Shipper Running Mismatch Wash-up Calculation

A Shipper's changed Running Mismatch (RM_n) is finally defined as:

$$RM_n = RM_{d-1} + (R_n - D_n) + ATQ_n + (BGP_n - BGS_n) + WU$$

where:

RM_{d-1} is the Shipper's initial published Running Mismatch for the previous Day, calculated [as-in accordance with per section 1.1](#) of the GTAC;

R_n is the Shipper's most recently calculated Receipt Quantity for that Day;

D_n is the Shipper's most recently calculated Delivery Quantity for that Day;

ATQ_n is the Shipper's the most recently calculated Aggregate Trade Quantity for that Day;

BGP_n is calculated ~~as per~~ [in accordance with paragraph 3.1 of Schedule X, clause 3.1](#);

BGS_n is calculated ~~as per~~ [in accordance with paragraph 3.3 of Schedule X, clause 3.3](#); and

WU is the Shipper's previously calculated Wash-up quantity for the ~~Month~~ [Month](#);

5.2 First Gas Running Mismatch Wash-up Calculation

First Gas changed Running Mismatch (RM_n) for a Day is defined as:

$$RM_n = RM_{d-1} + (R_n - D_n) + ATQ_n + (BGP_n - BGS_n) + WU$$

where:

RM_{d-1} is First Gas' initial published Running Mismatch for the previous Day, calculated ~~in accordance with~~ [as per section clause 1.1](#) of the GTAC;

R_n is First Gas' most recently calculated quantity of Gas purchased by First Gas for that Day;

D_n is First Gas' most recently calculated quantity of Gas sold by First Gas or consumed by equipment such as compressors, line heaters for that Day;

ATQ_n is First Gas' the most recently calculated Aggregate Trade Quantity for that Day;

BGP_n is calculated ~~as per~~ [in accordance with paragraph 3.1 of Schedule X, clause 3.1](#);

BGS_n is calculated ~~as per~~ [in accordance with paragraph 3.3 of Schedule X, clause 3.3](#); and

WU is the First Gas' previously calculated Wash-up quantity for the ~~Month~~ [Month](#);

5.3 Delivery Point OBA Party Running Mismatch Wash-up Calculation

A Delivery Point OBA Party's changed Running Mismatch (RM_n) for a Day is defined as:

$$RM_n = RM_{d-1} + (N_n - DQ_n) + ATQ_n + (BGP_n - BGS_n) + WU$$

where:

RM_{d-1} is the OBA Party's initial published Running Mismatch for the previous Day, calculated ~~as per~~ [in accordance with section clause 1.1](#) of the GTAC;

N_n is the most recently calculated total approved nominations for the applicable Delivery Point and that Day;

DQ_n is the most recently calculated metered quantity for the applicable Delivery Point and that Day;

ATQ_n is the OBA Party's most recently calculated Aggregate Trade Quantity for that Day;

BGP_n is Balancing Gas Purchases calculated [as per in accordance with paragraph 3.1 of Schedule X](#), ~~clause 3.1~~;

BGS_n is Balancing Gas Sold calculated [as per in accordance with paragraph 3.3 of Schedule X](#), ~~clause 3.3~~; and

WU is the OBA's previously calculated Wash-up quantity for the ~~m~~Month.

5.4 Receipt Point OBA Party Running Mismatch Wash-up Calculation

A Receipt Point OBA Party's changed Running Mismatch (RM_n) for a Day is defined as:

$$RM_n = RM_{d-1} + (RQ_n - N_n) + ATQ_n + (BGP_n - BGS_n) + WU$$

where:

RM_{d-1} is the OBA Party's initial published Running Mismatch for the previous Day, calculated [as per in accordance with section 1.1 of the GTAC](#);

RQ_n is the most recently calculated metered quantity for the applicable Receipt Point and that Day;

N_n is the most recently calculated total approved nominations for the applicable Receipt Point and that Day;

ATQ_n is the OBA Party's most recently calculated Aggregate Trade Quantity for that Day;

BGP_n is calculated [as per in accordance with paragraph 3.1 of Schedule X](#), ~~clause 3.1~~; and

BGS_n is calculated [in accordance with paragraph 3.3 of](#) ~~as per~~ Schedule X, ~~clause 3.3~~;

WU is the OBA's previously calculated Wash-up quantity for the ~~m~~Month.

- 5.5 The Final Running Mismatch positions when calculated by First Gas in accordance with [paragraphs 5.1 to 5.4](#) above will apply as ~~the each~~ Shipper's, OBA [Party's](#) and First Gas's opening position on D_{n+1} .

6 CALCULATION OF ERM WASH-UP QUANTITIES

6.1 Requirement

First Gas will recalculate the [P](#)positive and negative ERM quantities as based on the ~~w~~Wash-up Running Mismatch calculated in [accordance with paragraph 2 of Schedule X](#), ~~clause 2~~. Any resulting differences from what was previously charged will be debited and/or credited [as per in accordance with](#) Schedule ~~YZ~~.

6.2 **Determination of Running Mismatch Tolerance ~~w~~Wash up**

For each Day that RM_n has been calculated, First Gas will calculate the Running Mismatch Tolerance for each Party and OBA Party. This will be calculated with the same quantities used in the determination of RM_n and in accordance with the definition of Running Mismatch Tolerance in [clause-section 1.1](#) of the GTAC.

Where the Running Mismatch Tolerance is positive it is the positive Running Mismatch Tolerance (PT_n).

Where the Running Mismatch Tolerance is negative it is the negative Running Mismatch Tolerance (NT_n).

6.3 **Calculation of Positive and Negative ERM Quantity wash up**

For each Day that RM_n has been calculated, First Gas will calculate the positive ERM quantity wash-up ($PERM_n$) and negative ERM quantity wash-up ($NERM_n$):

(a) If RM_n is greater than PT_n ; then

$PERM_n$ will equal RM_n less PT_n ; otherwise

$PERM_n$ equals zero.

(b) If RM_n is less than NT_n ; then

$NERM_n$ will equal RM_n less NT_n multiplied by -1; otherwise

$NERM_n$ equals zero.

SCHEDULE Y: CALCULATION OF BALANCING WASH-UP AMOUNTS

1 REQUIREMENT

- 1.1 Changes to Running Mismatch and ERM quantities may result in changes to invoiced amounts.
- 1.2 First Gas will determine the difference between the amounts resulting from Running Mismatch and ERM changes and debit and/or credit the resulting changes to Shippers and OBA Parties.

2 CALCULATION OF BALANCING GAS ALLOCATION WASH-UP AMOUNT

2.1 Requirement

For each Day that Balancing Gas allocation quantities have been determined [in accordance with paragraphs per clause 6](#) of Schedule X, First Gas will determine the resulting debit and credit amounts for each Shipper and OBA Party.

2.2 Calculation of the Balancing Gas Allocation Wash-up Amount

First Gas will calculate for each Month:

- (a) The allocated amount based on the quantities determined in [accordance with paragraphs 3.2 and 3.3 of](#) Schedule X, ~~clauses 3.2 and 3.3~~ (BG_n):

$$BG_n = \sum_{i=1}^m (BGP_n \times P_n) - \sum_{i=1}^m (BGS_n \times S_n)$$

- (b) The Balancing Gas Allocation Wash-up Amount (BGW):

$$BGW = BG_n - BG_{n-1}$$

where:

m is the count of the Days of the Month;

BGP_n is calculated [in accordance with paragraph 3.2 of as per](#) Schedule X, ~~clause 3.2~~;

P_n is the applied price to the Balancing Gas purchase;

BGS_n is calculated [in accordance with paragraph 3.3 of as per](#) Schedule X, ~~clause 3.3~~;

S_n is the applied price to the Balancing Gas sale; and

BG_{n-1} is the most recent of the amount calculated [in accordance with as per clauses sections 8.8 and 8.9](#) of the GTAC or the previously calculated amount for BG_n .

2.3 Invoicing of the Balancing Gas Allocation Wash-up Amount

For the amounts calculated in [accordance with paragraph 2.2 of](#) Schedule X, ~~clause 2.2~~:

- (a) If BGW is positive, that amount will be charged to the relevant Shipper or OBA Party; or
- (b) If BGW is negative, that amount will be credited to the relevant Shipper or OBA Party.

3 CALCULATION OF ERM WASH-UP AMOUNT

3.1 Requirement

For each Day that ERM quantities have been determined [in accordance with paragraph 2 of as-per Schedule X, ~~clause 2~~](#). First Gas will determine the resulting ERM debit and credit amounts for each Shipper and OBA Party.

3.2 Calculation of the ERM Wash-up Amount

For each Month, First Gas will calculate:

- (a) The total amount using the ERM quantities determined [in accordance with paragraph 3 of as-per Schedule X, ~~clause 3~~](#) (ERM_n):

$$ERM_n = \sum_{i=1}^m (PERM_n \times F_{PERM} \times I_p) + \sum_{i=1}^m (NERM_n \times F_{NERM} \times I_n)$$

- (b) The ERM Wash-up Amount (EW):

$$EW = ERM_n - ERM_{n-1}$$

where:

m is the count of the Days of the Month;

$PERM_n$ is calculated [in accordance with paragraph 5.3\(a\) of as-per Schedule X, ~~clause 5.3\(a\)~~](#);

F_{PERM} is [calculated in accordance with as-per section 8.14\(b\) of the GTAC](#);

I_p is [as-per calculated in accordance with section 8.13 of the GTAC](#);

$NERM_n$ is calculated [as-per in accordance with paragraph 5.3\(b\) of Schedule X, ~~clause 5.3\(b\)~~](#);

F_{NERM} is [as-per calculated in accordance with section-clause 8.14\(a\) of the GTAC](#);

I_n is [as-per calculated in accordance with clause-section 8.13 of the GTAC](#);

ERM_{n-1} is the most recent of the total of the amounts calculated [in accordance with sections as-per-clause 8.12 and 8.13 of the GTAC](#) or the previous calculated amount for ERM_n .

3.3 Invoicing of the ERM Wash-up Amount

For the amounts calculated in [accordance with paragraph 3.2 of Schedule X, ~~clause 3.2~~](#):

- (a) If EW is positive, that amount will be charged to the relevant Shipper or OBA Party; or
- (b) If EW is negative, that amount will be credited to the relevant Shipper or OBA Party.

4 CALCULATION OF ERM REBATE WASH-UP AMOUNT

4.1 Requirement

For each Day that ERM quantities have been determined [in accordance with paragraph 3 of as-per Schedule X, ~~clause 3~~](#). First Gas will determine the resulting ERM rebate debit and credit amounts for each Shipper and OBA Party.

4.2 Calculation of the ERM Rebate Wash-up Amount

For each Month, First Gas will calculate:

- (a) The Shipper revised ERM rebate amount using the EW quantities determined in [accordance with paragraph 3.2 of Schedule X, clause 3.2](#) (ER_n):

$$ER_n = \sum_s EW \times DDQ_{Shipp} \div DDQ_{Total}$$

- (b) The ERM Rebate Wash-up Amount (ERW):

$$ERW = ER_n - ER_{n-1}$$

where:

$\sum_s EW$ is total of all Shippers amounts calculated [in accordance with paragraph 3.2 of as per Schedule X, clause 3.2](#);

DDQ_{Shipp} is [as per calculated in accordance with clause section 11.14](#) of the GTAC;

DDQ_{Total} is [as per calculated in accordance with clause section 11.14](#) of the GTAC; and

ER_{n-1} is the most recent of the total of the amounts calculated [as per in accordance with clause section 11.14](#) of the GTAC or the previously calculated amount for ER_n .

4.3 Invoicing of the ERM Wash-up Amount

For the amounts calculated in [accordance with paragraph 3.2 of Schedule X, clause 3.2](#):

- (a) If ERW is positive, that amount will be charged to the relevant Shipper or OBA Party; or
- (b) If ERW is negative, that amount will be credited to the relevant Shipper or OBA Party.