

# WHOLESALE MARKET UPLIFT PAYMENT PROCEDURES (VICTORIA)

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# **VERSION RELEASE HISTORY**

Version	Effective Date	Summary of Changes
3.0	25 October 2016	Update to reflect the National Gas Amendment (DWGM-AMDQ Allocation) Rule 2016 No. 1  As a consequence of the above rule change it is required to take AMDQ CC into account in clause 3.6 for the determination of Uplift hedge for the Longford CPP.  Add missing clause 6.1 heading, and correct reference in clause 6.4 from clause 6.1 to clause 6.2.  Update document to current procedure format.
2.1	1 May 2012	Updated to reflect that IHN and AIHN are by CPP, not by SIPs.  Emphasised that Market Participants can update their AMIQ profile during the gas day, but only the AMIQ profile submitted for the last schedule is used for AMIQ calculation. Clarified that the total uplift payments for an operating schedule is equal to the total ancillary payments for that schedule adjusted for 'AP clawback' as per the Ancillary payments functional design v9.0.  Included Mortlake system injection point in the Iona CPP group.  Removed 'LNG' from 'Authorised MDQ/ AMDQ credit certificate location' column in the CPP table and replaced it with 'N/A'.  Deleted '2:00 AM' from the AMIQ Profile Limit table.
2.0 (NGR)	5 February 2011	Changes in section 3.2, daily tariff V authorised MDQ updated every gas day rather than every business day
1.0 (NGR)	16 August 2010	Rebranded and updated for NGR
5.3	May 2009	Updated to include the daily apportionment of tariff V AMDQ in Clause 4.2
5.2	May 2008	Headings 8.4 and 8.5 where repeated with all references being to the contents in 8.5. The heading 8.5 has been removed with all cross references corrected to be to 8.4. Correction of AP flip flops has been incorporated.
5.1	January 2007	Remove words "minus one multiplied by" written into sections 8.1, 8.2 and 8.3.  Amend errors detected in version 5.0  Provide further clarity in some of the clauses  Note, Version 5.0 was superseded by this version before it was implemented
5	11 Nov 2005	Rewrite for Gas Market Project
4	20 <sup>th</sup> Aug 2004	Correct references between uplifts procedures clause 5.2 and 5.3 and MSO Rules clause 5.1.4. Alter clause 5.1 and 5.2 to remove words "by Market Participant" which were erroneously inserted in a previous version of these procedures Correct "reference documents" section  Reword section 3.3  Clarification that compressor fuel gas is excluded from Cumulative D AMDQ exceedance (clause 6.3.1)
3	26 <sup>th</sup> Nov 2002	Incorporates new concepts of conditional transfers and interchangeable close proximity injection points
2	May 2002	Complete rewording to align with the function design document Procedures extended to include site AMDQ credits
1	2nd July 2001	First issue.



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## 1. INTRODUCTION

# 1.1. Purpose and Scope

These are the uplift payment procedures under rule 240 of the National Gas Rules (**Procedures**).

These Procedures have effect only for the purposes set out in the National Gas Rules (**NGR**). The NGR and the National Gas Law (**Law**) prevail over these Procedures to the extent of any inconsistency.

# 1.2. Definitions and Interpretation

## 1.2.1. Glossary

The words, phrases and abbreviations set out in the table below have the meanings set out opposite them when used in these Procedures.

Terms defined in the National Gas Law or the NGR have the same meanings in these Procedures unless otherwise specified in this clause. Those terms are intended to be identified in these Procedures by italicising them, but failure to italicise a defined term does not affect its meaning.

TERM	MEANING		
Reference Hub	a notional common point of reference within the declared transmission system established by AEMO for the purpose of valuing <i>authorised MDQ</i> and <i>AMDQ credit certificates</i> .		
Reference Hub AMDQ credit nomination	a quantity of AMDQ credit nominated to the Reference Hub by a Market Participant.		
Reference Hub authorised MDQ	authorised MDQ held by a Market Participant at the Reference Hub for the purpose of hedging against uplift payments.		
site authorised MDQ	authorised MDQ held by a Market Participant at a site for the purpose of hedging against uplift payments.		

#### 1.2.2. Interpretation

The following principles of interpretation apply to these Procedures unless otherwise expressly indicated:

- (a) These Procedures are subject to the principles of interpretation set out in Schedule 2 of the National Gas Law.
- (b) References to time are references to Australian Eastern Standard Time.

## 1.3. Related Documents

Reference	Title	Location
	Wholesale Market Ancillary Payment Procedures (Victoria)	AEMO website
	Wholesale Market Gas Scheduling Procedures (Victoria)	AEMO website

#### 2. UPLIFT PAYMENTS - GENERAL

# 2.1. Congestion, surprise and common uplift payments

*Uplift payments* are, so far as practicable, to be allocated to the cause, and are therefore allocated to those *Registered Participants* whose actions generated the relevant *ancillary payments*.



In allocating to the cause, AEMO categorises *uplift payments* as congestion *uplift payments*, surprise *uplift payments* or common *uplift payments*.

#### 2.1.1. Congestion uplift payments

Where ancillary payments are payable in respect of a gas day, congestion uplift payments will be allocated to:

- (a) a Market Participant, where the total withdrawals of gas by that Market Participant in a scheduling interval exceed its AMIQ in that scheduling interval; and
- (b) a declared transmission system service provider, where, subject to clause 2.1.3, that declared transmission system service provider fails to provide the agreed system capacity under its service envelope agreement with AEMO.

## 2.1.2. Surprise uplift payments

Where ancillary payments are payable in respect of a gas day, surprise uplift payments will be allocated to any Market Participant which does not inject or withdraw gas in a gas day in accordance with that Market Participant's operating scheduled injections or operating scheduled withdrawals (as applicable) in the previous schedule or its demand forecasts or operating scheduled controllable withdrawals increase or decrease between the previous and the current schedules.

#### 2.1.3. Common uplift payments

If the aggregate amount of *uplift payments* allocated by AEMO as congestion *uplift payments* and surprise *uplift payments* in respect of a *gas day* do not fully fund the total *ancillary payments* payable in respect of that *gas day*, the unfunded portion of such *ancillary payments* is allocated by AEMO as common *uplift payments*.

Common *uplift payments* arise in the following circumstances:

- (a) where AEMO overrides the total *demand forecasts* from all *Market Participants* by increasing the *demand forecasts* for *scheduling*, but the actual uncontrollable demand is less. As a result, the additional withdrawals cannot be attributed to specific *Market Participants*' forecasting errors and must therefore be categorised by AEMO as common *uplift payments* to be shared by all *Market Participants*;
- (b) where the terms and conditions of the service envelope agreement of the relevant declared transmission system service provider limits the amount of uplift payments that would otherwise be payable by that declared transmission system service provider as a result of failing to meet its agreed capacity requirements; or
- (c) where *uplift payments* are payable but there is no basis for categorising these *uplift payments* as surprise or congestion *uplift payments*.

#### 2.2. Exclusion of operational gas

The quantities of gas used by AEMO to determine the allocation of *uplift payments* exclude any *operational gas*.

## 2.3. Interchangeability of close proximity injection points

Close proximity injection points as at the date of these Procedures are set out in Schedule 1. AEMO may update the list of close proximity injection points from time to time by publication on its website.

# 2.4. Gas withdrawals by AEMO for LNG stock replenishment

Gas withdrawn by AEMO or the *declared LNG storage provider* for liquefaction for stock replenishment in the LNG storage facility is not eligible for *uplift payments*. AEMO is responsible for paying for such withdrawals of gas and recovering any costs attributable to the *declared LNG storage provider* under its agreements with the *declared LNG storage provider*.



#### 2.5. Default Quantities

If, prior to the beginning of a gas day, a Market Participant has not provided AEMO with:

- (a) an AMIQ profile for the gas day in accordance with clause 3.8 of these Procedures;
- (b) an agency injection hedge nomination at a system injection point in accordance with clause 3.3 of these Procedures; and/or
- (c) an injection hedge nomination at a system injection point,

for that *Market Participant*'s operating *scheduled injection*, AEMO will allocate a value of zero for those scheduled quantities in the relevant *uplift payment* calculations for that *Market Participant*.

#### 3. AMIQ

This clause sets out how AEMO calculates a *Market Participant's AMIQ* for the purposes of determining congestion *uplift payments*.

## 3.1. Diversified authorised MDQ and AMDQ credits

For the purposes of calculating *uplift payments*, the value attributed to *authorised MDQ* and *AMDQ credit* by AEMO is the diversified value assigned by AEMO to that *authorised MDQ* or *AMDQ credit certificates* nominated to a site or the Reference Hub.

For authorised MDQ, this is determined by summing the product of each site authorised MDQ by its site specific diversity factor and then adding to the Reference Hub authorised MDQ for the relevant Market Participant.

For *AMDQ credit*, this is determined by summing the product of the *AMDQ credit certificate* nominated to each site by its site specific diversity factor and then adding to the Reference Hub *AMDQ credit* nomination for the relevant *Market Participant*.

The diversity factors are determined by AEMO in accordance with the *authorised MDQ* transfer algorithm.

# 3.2. Allocation of authorised MDQ for tariff V withdrawal points to Market Participants

An annual allocation of *authorised MDQ* for *tariff V withdrawal points* is made by AEMO to *Market Participant*s for use in supporting uplift hedges. This allocation is determined by AEMO by pro-rating the total amount of *authorised MDQ* for all *tariff V withdrawal points* to each *Market Participant* based on that *Market Participant*'s share of the total amount of gas withdrawn from *tariff V withdrawal points* during the peak demand days for those *tariff V withdrawal points* in the previous winter.

For the purposes of the preceding paragraph, the peak demand days are the top ten days in terms of highest quantities of gas withdrawn from *tariff V withdrawal points* between 1 May and 30 September.

This annual allocation of *authorised MDQ* takes place each year on the fifth business day of November, after the total amount of *authorised MDQ* for all *tariff V withdrawal points* has been adjusted for changes in tariff V *Customer* numbers between winter and the end of October of that year. The changes in *Customer* numbers are those changes which are provided to AEMO through full retail contestability fees.

Until the next annual allocation, the allocation is adjusted by AEMO on the fifth business day of every subsequent month to take account of any changes in tariff V *Customer* numbers provided to AEMO through full retail contestability fees.

Every other *gas day*, the allocation is adjusted by AEMO to take account of estimated changes in *Customer* numbers. This estimate is determined by AEMO using the number of:

(a) tariff V Customer transfers completed;



- (b) new site registrations received; and
- (c) site de-registrations received,

by AEMO since the previous gas day.

The daily adjustments are based on data received in respect of non-declared host retailers only. As data will not typically be available for new and deregistered sites for declared host retailers, any such data is ignored in the calculation. This is then corrected by AEMO on a monthly basis to reconcile with the *Customer* numbers associated with full retail contestability fees.

## 3.3. Agency Injection Hedge Nominations

A *Market Participant* may arrange for part or all of its gas injections to be applied to another *Market Participant* when determining that other *Market Participant*'s amount of uplift hedges.

Prior to making any such agency injection hedge nomination, the injecting Market Participant must enter into an agency arrangement with the relevant nominated Market Participant and that agency arrangement must be accredited by AEMO.

The injecting *Market Participant* may only make an *agency injection hedge nomination* up to one hour before the start of the *gas day* in which that *agency injection hedge nomination* is to apply.

Agency injection hedge nominations do not affect the market allocations and trading amounts of the injecting Market Participant or the other Market Participant.

#### 3.3.1. Determination of injection support for uplift hedge for an injecting Market Participant

The amount of a *Market Participant*'s daily operating *scheduled injections* for the last approved *operating schedule* at a *close proximity injection point* that is to be used to determine its uplift hedge equals the lesser of:

- (a) the sum of that *Market Participant's* last approved operating *scheduled injections* over all the associated *system injection points*; and
- (b) that Market Participant's injection hedge nomination,

in respect of that gas day at that close proximity injection point.

# 3.3.2. Allocation of operating scheduled injections for uplift hedge as a result of agency injection hedge nominations

- (a) If the sum of an injecting *Market Participant's* operating *scheduled injections* at a *close proximity injection point* for the last approved *operating schedule* of a *gas day* are greater than or equal to the sum of that *Market Participant's*:
  - (i) agency injection hedge nominations for other Market Participants; and
  - (ii) injection hedge nominations,

applicable at that *close proximity injection point*, the *Market Participant*s nominated to receive an *agency injection hedge nomination* by that injecting *Market Participant* will only be allocated the operating *scheduled injection* amount for uplift hedge purposes that was nominated in the relevant *agency injection hedge nomination*.

- (b) If the sum of an injecting Market Participant's *operating scheduled* injections at a *close proximity injection point* for the last approved *operating schedule* of a *gas day* are less than the sum of that Market Participant's:
  - (i) agency injection hedge nominations for other Market Participants; and
  - (ii) injection hedge nominations

applicable at that *close proximity injection point*, the *Market Participant*s nominated to receive an *agency injection hedge nomination* by that injecting *Market Participant* will be



allocated an injection amount for uplift hedge purposes in accordance with one of the following allocation methods nominated by that *Market Participant*:

#### (A) Pro rata Method

If the pro-rata method is nominated, each *Market Participant* nominated by that *Market Participant* to receive an *agency injection hedge nomination* at that *close proximity injection point* will be allocated for uplift hedge purposes an amount of that injecting *Market Participant*'s operating *scheduled injections* for the last approved *operating schedule* of the *gas day* at that *close proximity injection point* less the amount of its injections nominated to support its *AMIQ* as determined in clause 3.3.1, on a pro-rata basis based on that injecting *Market Participant*'s *agency injection hedge nominations* at that *close proximity injection point*, or

#### (B) Preference Method

If the preference method is nominated, the injecting *Market Participant* who makes an *agency injection hedge nomination* must assign a priority to the *allocations* as part of its *agency injection hedge nominations* for that *close proximity injection point*. The *agency hedge nominations* are then met in the order of their priority ranking until that injecting *Market Participant*'s operating *scheduled injections* for the last approved *operating schedule* of the *gas day* available for *agency injection hedge nominations* have been exhausted. The quantity of operating *scheduled injections* available for *agency injection hedge nominations* equals the injecting *Market Participant*'s operating *scheduled injections* for the last approved *operating schedule* of the *gas day* less the amount of its injections used to support its *AMIQ* as determined in clause 3.3.1.

# 3.4. Scheduled injection amounts that do not generate ancillary payments

Operating scheduled injections by a Market Participant that are used by that Market Participant as an uplift hedge for its own market settlements, or as an uplift hedge for other Market Participants, are not taken into account by AEMO in determining that Market Participant's entitlement to ancillary payments.

# 3.5. Determination of uplift hedge associated with non-Longford close proximity injection points

The quantity of AMDQ credits available to a Market Participant at close proximity injection points other than Longford close proximity injection point for the determination of an uplift hedge for a gas day is equal to the lesser of:

- (a) the diversified AMDQ credit quantities determined pursuant to clause 3.1 for AMDQ credit certificates registered to that Market Participant for that gas day at each close proximity injection point; and
- (b) the sum of the operating *scheduled injections* allocated to that *Market Participant* for that gas day at each *close proximity injection point* determined pursuant to clause 3.3.

# 3.6. Determination of uplift hedge associated with Longford close proximity injection point

The quantity of *authorised MDQ* available to a *Market Participant* at the Longford *close proximity injection point* for the determination of an uplift hedge for a *gas day* is equal to the lesser of:

(a) the diversified tariff D *authorised MDQ* of each of that *Market Participant*'s tariff D *Customers*, as determined under clause 3.1, and the amount of tariff V *authorised MDQ* 



- assigned to that *Market Participant* for uplift hedge as determined under clause 3.2, for the Longford *close proximity injection point*; and
- (b) the diversified AMDQ credit quantities determined pursuant to clause 3.1 for AMDQ credit certificates registered to that Market Participant for that gas day at the Longford close proximity injection point, and
- (c) the sum of the operating *scheduled injections* that were allocated to that *Market Participant* for that *gas day* at the Longford *close proximity injection point* determined under clause 3.3.

# 3.7. No retrospective adjustment of authorised MDQ or AMDQ credit quantities

The authorised MDQ or AMDQ credit quantities available to a Market Participant in respect of a gas day are fixed at the values registered in the AMDQ credit certificate and site nominations register at the beginning of that gas day and must not be adjusted to take account of any Customer transfers or transfers of authorised MDQ or AMDQ credit certificates between Market Participants that occur during that gas day after the first schedule.

#### 3.8. Calculation of AMIQ

A Market Participant's AMIQ in respect of a gas day is determined by AEMO by multiplying the sum of the authorised MDQ and AMDQ credits for that Market Participant as determined by AEMO pursuant to clauses 3.5 and 3.6, by the AMIQ profile submitted by that Market Participant to AEMO for the final (10pm) schedule of the gas day.

AMIQ profiles submitted by Market Participants may be updated during a gas day, and must be within the AMIQ profile limits specified in Schedule 2.

# 4. CALCULATION OF MARKET PARTICIPANT EFFECTIVE DEMAND FORECAST

Where a *demand forecast override* increases the total forecast withdrawals by *Market Participants*, the additional quantity of withdrawals is allocated by AEMO to those *Market Participants* who have under forecast their withdrawals for the purpose of assigning surprise and congestion *uplift payments*.

Where a *demand forecast override* decreases the total forecast withdrawals by *Market Participants*, the subtracted quantity of withdrawals is not taken into account by AEMO for the purposes of allocating *uplift payments*.

## 4.1. Calculation of adjusted demand forecast override

- (a) If the net effect of all *demand forecast overrides* for all hours of a *scheduling interval* is either zero or a decrease in total forecast withdrawals, then for the purpose of allocating *uplift payments* to *Market Participants*, the adjusted *demand forecast override* in each hour of that *scheduling interval* will be deemed to be zero.
- (b) If the net effect of all *demand forecast overrides* for all hours of a *scheduling interval* is an increase in total forecast withdrawals and the effect of a *demand forecast override* in an hour within the *scheduling interval* is either zero or a decrease in total forecast withdrawals, then for the purpose of allocating *uplift payments* to *Market Participants*, the adjusted *demand forecast override* in that hour of that *scheduling interval* will be deemed to be zero.
- (c) If the net effect of all *demand forecast overrides* for all hours of a *scheduling interval* is an increase in total forecast withdrawals and the effect of a *demand forecast override* in an hour within the *scheduling interval* is an increase in total forecast withdrawals, the adjusted *demand forecast override* is this value multiplied by the ratio created by dividing the cumulative *demand forecast override* in the *scheduling interval* (which must be positive) by the sum of the hourly *demand forecast overrides* in that *scheduling interval* which exceed zero. This ratio must be greater than 0 and less than 1.



## 4.2. Allocation of adjusted demand forecast override to Market Participants

If there is a positive adjusted *demand forecast override* for an hour under clause 4.1, *demand forecast override* in that hour is allocated by AEMO to those *Market Participant*s which withdrew more gas in that hour than their *demand forecast*, but the amount of additional withdrawals allocated to a *Market Participant* must not exceed the amount by which that *Market Participant* exceeded its *demand forecast* for that hour.

For each hour in the scheduling horizon of each operating schedule:

- (a) if the adjusted demand forecast override exceeds zero but is less than the total amount by which Market Participants exceed their demand forecasts for that hour, the adjusted demand forecast override is allocated on a pro-rata basis to those Market Participants whose uncontrollable withdrawals of gas from the declared transmission system in that hour exceeded their demand forecasts for that hour; and
- (b) if the adjusted demand forecast override exceeds the amount by which Market Participants in total exceed their demand forecasts, the adjusted demand forecast override is allocated to those Market Participants whose uncontrollable withdrawals of gas from the declared transmission system in that hour exceeded their demand forecasts for that hour but only up to the actual quantities by which their actual uncontrollable withdrawals exceed their demand forecasts for that hour. Where this does not account for the full amount of the adjusted demand forecast override, any uplift payments associated with the balance of the adjusted demand forecast override are recovered by AEMO as common uplift payments.

A Market Participant's effective demand forecast for each hour within the scheduling interval of an operating schedule is the demand forecast for that Market Participant plus the adjusted demand forecast override for that hour as determined in clauses a) and b) above.

## 4.3. Residual Demand Forecast Override

The residual amount of *demand forecast override* which is used by AEMO to determine common *uplift payments*, is equal to the sum of all *Market Participants' demand forecasts* and the *demand forecast overrides* less the sum of all *demand forecasts* after adjustment under clause 4.2, for each hour in the *scheduling horizon* of each *operating schedule* for the *gas day*. Non-zero residual *demand forecast override* can only occur in the circumstances described in clause b).

#### 5. SURPRISE UPLIFT QUANTITIES

Chapter 5 sets out how AEMO determines the quantity of gas associated with the funding of surprise *uplift payments* in respect of each *operating schedule*.

These quantities are used by AEMO pursuant to Chapter 7 and Chapter 8 of these Procedures to allocate surprise *uplift payments*.

# 5.1. Determination of adjusted deviation

#### 5.1.1. Hourly deviation

For each hour of the gas day for each Market Participant, the hourly deviation attributable to that Market Participant is the actual imbalance quantity for that Market Participant in that hour less the scheduled imbalance quantity for that Market Participant in that hour. For the purposes of these Procedures, the hourly imbalance quantity for a Market Participant is calculated as that Market Participant's hourly operating scheduled injection less the hourly operating scheduled withdrawal.

The demand forecast used to determine the scheduled imbalance for that Market Participant is the demand forecast of that Market Participant as adjusted in accordance with Chapter 4 of these Procedures to take account of any positive demand forecast overrides which may apply in that hour.



#### 5.1.2. Scheduling interval deviation

The deviation for a Market Participant for a scheduling interval is the aggregate of the positive and negative hourly deviations for that Market Participant for all hours of that scheduling interval, determined by AEMO pursuant to clause 5.1.1 using the actual imbalance quantity and the last operating schedule published on that gas day to determine that Market Participant's scheduled imbalances.

#### 5.1.3. Scheduled interval hourly deviation (SIHDQ)

The SIHDQ for a *Market Participant* for each *scheduling interval* is the aggregate of the negative hourly *deviation* quantities for that *Market Participant* for all hours in that *scheduling interval*, determined in accordance with clause 5.1.1 and using the *actual imbalance* quantity and the last *operating schedule published* on that *gas day* for that day to determine *scheduled imbalances*.

# 5.1.4. Change in constrained on injection due to an ad-hoc operating schedule

If an ad hoc *operating schedule* is *published* by AEMO, AEMO must determine the change in constrained on injection quantities resulting from that ad hoc *operating schedule*.

#### 5.1.5. Effective deviation

If an ad hoc *operating schedule* is published and the change in constrained on injection quantities determined by AEMO for that ad hoc schedule is positive, then the effective *deviation* for a *Market Participant* for that *scheduling interval* is the SIHDQ determined in accordance with clause 5.1.3.

Otherwise, the effective deviation for a Market Participant for that scheduling interval is the deviation determined in accordance with clause 5.1.2.

#### 5.1.6. Allocation Factor

An allocation factor is used by AEMO to allocate *uplift payments* attributable to any increase in constrained on injection quantities in a *scheduling interval* following an ad hoc *operating schedule* to *Market Participants* who have a non-zero SIHDQ for the *scheduling interval* during which the ad hoc *operating schedule* is published.

The allocation factor for a *scheduling interval* in respect of which an ad hoc *operating schedule* is *published* is:

the greater of:

- minus one multiplied by the increase in constrained on injection quantities within that scheduling interval, determined in accordance with clause 5.1.4; and
- the sum of all Market Participants' effective deviation within that scheduling interval for that operating schedule

divided by

• the sum of all *Market Participants*' effective *deviation* within that *scheduling interval* for that operating schedule.

#### 5.1.7. Adjusted Deviation

The adjusted deviation for a Market Participant for each operating schedule is:

• the effective *deviation* for that *Market Participant* for the *scheduling interval* immediately preceding the current *scheduling interval* for that *operating schedule* determined by AEMO in accordance with clause 5.1.5,

plus

• the effective deviation for that Market Participant for the scheduling interval for that schedule determined by AEMO in accordance with clause 5.1.5, multiplied by any allocation factor applicable for that scheduling interval determined by AEMO in accordance with clause 5.1.6,

less



the effective deviation for that Market Participant for the scheduling interval immediately
preceding that scheduling interval for that schedule determined by AEMO in accordance
with clause 5.1.5, multiplied by any allocation factor applicable for the scheduling interval
immediately preceding the current scheduling interval for that operating schedule
determined by AEMO in accordance with clause 5.1.6.

# 5.2. Surprise uplift quantity for a Market Participant

The surprise uplift quantity for a Market Participant for each operating schedule is:

- for the first *operating schedule* of a *gas day*, minus one multiplied by the adjusted *deviation* determined in accordance with clause 5.1.7.
- for the updated operating schedules,
  - the amount by which that Market Participant's effective demand forecast (determined under clause 4.2) has changed for the hours of the scheduling horizon of that schedule over that Market Participant's effective demand forecast of the same hours in the previous schedule.

#### plus

 the amount by which that Market Participant's operating scheduled controllable withdrawals have changed for the hours of the scheduling horizon of that schedule over that Market Participant's operating scheduled controllable withdrawals for the same hours in the previous schedule

#### minus

• the adjusted *deviation* for that *Market Participant* for that schedule determined in accordance with clause 5.1.7.

If this calculation results in:

- (a) a positive amount, this may result in that *Market Participant* having to pay *uplift payments* to AEMO for that *scheduling interval* in that *operating schedule*; and
- (b) a negative amount, this may result in that *Market Participant* being paid *uplift payments* by AEMO for that *scheduling interval* in that *operating schedule*.

# 5.3. Surprise uplift quantity for residual demand forecast override

## 5.3.1. Initial schedule surprise uplift quantity for residual demand forecast override

For the initial *operating schedule* for the *gas day*, the surprise uplift quantity for residual AEMO *demand forecast override* is the sum of the residual *demand forecast override* for all hours calculated for the initial *operating schedule* of the *gas day* pursuant to clause 4.3.

#### 5.3.2. Updated schedule surprise uplift quantity for residual demand forecast override

For each updated *operating schedule* of a *gas day* after the initial *operating schedule*, the surprise uplift quantity for residual *demand forecast override* is determined by AEMO as follows:

• the change in the sum of total *demand forecast* and total *demand forecast override* over the scheduling horizon for that *operating schedule* 

#### minus

• the change in the sum of all *Market Participants*' effective *demand forecast* calculated by AEMO pursuant to clause 4.2 over the *scheduling horizon* for that *operating schedule*.

#### 5.4. Determination of the total surprise uplift quantity for each schedule

The positive surprise and negative surprise uplift quantity for a *Market Participant* for each schedule is determined by AEMO as follows:

A Market Participant's positive surprise uplift quantity is



• the greater of zero and that *Market Participant*'s surprise uplift quantity for that schedule as determined by AEMO pursuant to clause 5.2

plus

• the greater of zero and that *Market Participant*'s surprise uplift quantity for the residual demand forecast override for that schedule determined by AEMO pursuant to clause 5.3.

A Market Participant's negative surprise uplift quantity is

• the lesser of zero and that *Market Participant's* surprise uplift quantity for that schedule as determined by AEMO under clause 5.2

plus

• the lesser of zero and that *Market Participant's* surprise uplift quantity for the residual demand forecast override for that schedule determined by AEMO pursuant to clause 5.3.

## 6. CONGESTION UPLIFT QUANTITIES - EXCEEDING AMIQ

This clause sets out how AEMO determines the quantity of gas which exceeds *AMIQ* for each *Market Participant*.

## 6.1. Apportionment of congestion uplift

This quantity is used to apportion congestion *uplift payments* to *declared transmission system service providers* and *Market Participants* as follows:

(a) Declared transmission system service providers

Apportionment is based on the level of congestion caused by a *declared transmission* system service provider's failure to meet its obligations under its service envelope agreement but is subject to any limitation on the liability of the *declared transmission* system service provider for uplift payments under its service envelope agreement.

The maximum amount of congestion *uplift payments* allocated to *declared transmission system service providers* is determined by AEMO in accordance with the terms of the relevant *service envelope agreement*.

(b) Market Participants

Apportionment is based on each *Market Participant's* total *scheduled withdrawal* quantity for each *scheduling interval* in an *operating schedule* which exceeds that *Market Participant's AMIQ* for that *scheduling interval*.

## 6.2. Calculation of the quantity of gas which exceeds AMIQ

For each scheduling interval, AEMO will calculate the amount that a Market Participant's total adjusted operating scheduled withdrawals (being the sum of that Market Participant' effective demand forecast as determined pursuant to clause 4.2 and its operating scheduled controllable withdrawal) exceeds that Market Participant's AMIQ for that scheduling interval (as determined pursuant to clause 3.8.)

# 6.3. Calculation of congestion caused by failure of declared transmission system service provider

For each *scheduling interval*, AEMO will estimate the quantity of congestion caused by the failure of any *declared transmission system service provider* to fulfil its obligations under its respective *service envelope agreement*.

# 6.4. Change in the quantity of gas which exceeds AMIQ

For each *scheduling interval* following the publication of an updated *operating schedule*, AEMO will calculate the increase or decrease (if any) in the amount by which a *Market Participant's* 



total adjusted operating scheduled withdrawals exceeds that Market Participant's AMIQ as determined under clause 6.2.

# 6.5. Change in congestion caused by failure of declared transmission system service provider

For each *scheduling interval* following the publication of an updated *operating schedule*, AEMO will calculate the increase or decrease (if any) in *declared transmission system service provider* congestion quantities determined under clause 6.3.

# 6.6. Determination of the total congestion quantity for each operating schedule

#### 6.6.1. Initial operating schedule

The total congestion quantity for all *Market Participants* and *declared transmission system* service providers for the initial schedule of a gas day is equal to:

 the sum of the amounts calculated under clause 6.1 for each Market Participant for all scheduling intervals in the initial operating schedule of that gas day and all Market Participants;

plus

• the sum of the amounts calculated under clause 6.3 for each *declared transmission system* service provider for all scheduling intervals in the initial operating schedule of that gas day and all relevant *declared transmission system service providers*.

#### 6.6.2. Determination of the total congestion quantity for each updated operating schedule

The total positive and negative congestion quantities attributable to *Market Participant*s and *declared transmission system service provider*s for each *scheduling horizon* of each updated *operating schedule* in the *gas day* is determined by AEMO as follows:

- (a) The total positive congestion quantities are equal to:
  - the greater of zero and the amounts calculated under clause 6.4 for each *Market Participant* for all of the *scheduling intervals* within the *scheduling horizon* of that updated *operating schedule* and all *Market Participants*;

plus

- the greater of zero and the amounts calculated under clause 6.5 for each declared transmission system service providers for all scheduling intervals within the scheduling horizon of that updated operating schedule and all the relevant declared transmission system service providers.
- (b) The total negative congestion quantities are equal to:
  - the lesser of zero and the amounts calculated under clause 6.4 for each *Market Participant* for all *scheduling intervals* within the *scheduling horizon* of that updated operating schedule and all *Market Participants*;

plus

• the lesser of zero and the amounts calculated under clause 6.5 for each declared transmission system service providers for all scheduling intervals within the scheduling horizon of that updated operating schedule and all relevant declared transmission system service providers.



# 7. APPORTIONING TOTAL UPLIFT PAYMENTS TO COMMON, SURPRISE AND CONGESTION UPLIFT PAYMENTS

Chapter 7 describes how total *uplift payments* are apportioned by AEMO to common, surprise and congestion *uplift payments* for each *operating schedule*.

# 7.1. Total uplift payments

An algorithm known as 'AP flip flop' is applied to the aggregate of all *Market Participants*' ancillary payments in order to reduce fluctuations in the aggregated ancillary payments changing from positive to negative between schedules. The algorithm works by cancelling negative ancillary payments with positive ancillary payments in preceding schedules as determined pursuant to section 9.3 of the most recent version of the Ancillary Payment Functional Design found on AEMO's website.

The total amount of *uplift payments* for an *operating schedule* is an amount (in \$) equal to the aggregate of all *Market Participants' ancillary payments* for that schedule calculated in accordance with the Wholesale Market *Ancillary Payment Procedures (Victoria)* and after 'AP flip flop' adjustments.

A positive *uplift payment* value represents a payment from a *Market Participant* to AEMO.

# 7.2. Uplift rate caps

The positive and negative *uplift payment* rates for each schedule must be capped at the corresponding average *ancillary payment* rates in that schedule. This ensures that the relevant *declared transmission system service provider* and/or *Market Participant*s (as applicable) fund the corresponding *ancillary payments* on a \$/GJ basis. The positive and negative average rates for *ancillary payments* are determined pursuant to clause 7.5.9 of the *ancillary payment procedures*.

Note: Both rates will have positive values.

#### 7.2.1. Determination of the Initial Positive Uplift Rate Cap (\$/GJ)

The positive uplift rate for each schedule is calculated from the total *uplift payment* for that schedule (if it is positive), divided by the positive surprise and congestion quantities for that schedule, as calculated in clauses 5.4 and 6.6 respectively.

#### 7.2.2. Determination of the Revised Positive Uplift Rate (\$/GJ)

The positive uplift rate for each schedule calculated in accordance with clause 7.2.1 is then compared to the positive average *ancillary payment* rate for that schedule. If the positive uplift rate exceeds the positive average *ancillary payment* rate, then the revised positive uplift rate will be calculated and set equal to the positive average *ancillary payment* rate. Otherwise it will remain equal to the positive uplift rate.

## 7.2.3. Determination of the Initial Negative Uplift Rate Cap (\$/GJ)

The negative uplift rate for each schedule is calculated from the total *uplift payment* for that schedule (if it is negative), divided by the negative surprise and congestion quantities for that schedule, as calculated in accordance with clauses 5.4 and 6.6 respectively.

#### 7.2.4. Determination of the Revised Negative Uplift Rate (\$/GJ)

The negative uplift rate for each schedule calculated in clauses 7.2.3 is then compared to the negative average *ancillary payment* rate for that schedule. If the negative uplift rate exceeds the negative average *ancillary payment* rate, then the revised negative uplift rate will be calculated and set equal to the negative average *ancillary payment* rate. Otherwise, it will remain equal to the negative uplift rate.

Note: Negative uplift rates will be positive numbers.



# 7.3. Determination of uplift payments attributable to congestion

The total amount of *uplift payment* (in \$) attributable to "congestion" at a schedule is equal to:

- If the total uplift payment for that schedule is positive, the corresponding revised positive
  uplift rate multiplied by the corresponding positive total congestion quantity;
- Otherwise, the corresponding revised negative uplift rate multiplied by the corresponding negative total congestion quantity for that schedule.

# 7.4. Determination of uplift payments attributable to surprise

The total amount of *uplift payment* (in \$) attributable to "surprise" uplift at a schedule is equal to:

- If the total uplift payment for that schedule is positive, then the corresponding revised
  positive uplift rate multiplied by the corresponding sum of all Registered Participants' positive
  surprise quantity for that schedule, excluding amounts attributable to residual demand
  forecast override;
- Otherwise, the corresponding revised negative uplift rate multiplied by the corresponding sum of all *Registered Participants*' negative surprise quantities for that schedule, excluding amounts attributable to residual *demand forecast override*.

# 7.5. Determination of uplift payments attributable to common

The total *uplift payment* (in \$) due to "common" uplift is determined as the total *uplift payment*, less "congestion" uplift and less "surprise" uplift that is allocated to *Registered Participants* determined under clauses 7.3 and 7.4. If the average ancillary rate cap has been exceeded, the corresponding *uplift payment* above this cap also has to be distributed into common uplift.

This comprises three components, described below.

#### 7.5.1. "Common" uplift for residual demand forecast override

The first common *uplift payment* quantity is associated with residual *demand forecast overrides* determined under clause 5.3. This also includes any amount of *uplift payments* that have been capped due to the *ancillary payment* rate cap.

The total amount of uplift attributable to residual *demand forecast override* at a schedule is equal to:

• If the total *uplift payment* is positive,

the revised positive uplift rate multiplied by any positive surprise quantity due to unallocated residual *demand forecast override*, plus, the difference between the original and the revised positive uplift rate multiplied by the total positive congestion quantity and the sum of all *Market Participants*' positive surprise quantities for that schedule;

• If the total uplift payment is negative,

the revised negative uplift rate multiplied by any negative surprise quantity due to unallocated residual *demand forecast override*, plus, the difference between the original and the revised negative uplift rate multiplied by the total negative congestion quantity and the sum of all *Market Participants*' negative surprise quantities for that schedule.

# 7.5.2. "Common" uplift for declared transmission system service provider liability limit excess

The second common *uplift payment* quantity is any \$ amount of *uplift payment* that exceeds the *declared transmission system service provider*'s liability limit.

#### 7.5.3. Remaining uplift

The third component of common *uplift payment* quantity is any \$ amount of residual *uplift payment* (which cannot otherwise be assigned to any causes.)

The remaining *uplift payment* quantity is calculated as the total *uplift payment* minus the congestion *uplift payment*, the surprise *uplift payment*, and the residual *demand forecast override*.



Note: This will only occur when no *Market Participant* is allocated with surprise or congestion uplift.

#### 8. ALLOCATION OF UPLIFT PAYMENTS TO REGISTERED PARTICIPANTS

# 8.1. Surprise uplift payable by or to a Market Participant

If the *uplift payment* (in \$) for a schedule is positive, then the *uplift payment* for a schedule due to positive surprise to be paid by a *Market Participant* is equal to

• the total positive surprise *uplift payment* (in \$) for that schedule, as calculated under clause 7.4,

multiplied by

• the total quantity (in GJ) of positive surprise for that *Market Participant* for that schedule as calculated under clause 5.2,

divided by

• the sum of all *Market Participants*' positive surprise quantities for that schedule as calculated under clause 5.4.

If the *uplift payment* (in \$) for a schedule is negative, then the *uplift payment* for a schedule due to negative surprise to be paid to a *Market Participant* is equal to

• the total negative surprise *uplift payment* (in \$) for a schedule, as calculated under clause 7.4,

multiplied by

• the total quantity (in GJ) of negative surprise for that *Market Participant* for that schedule as calculated under clause 5.2,

divided by

• the sum of all *Market Participants*' negative surprise quantities for that schedule as calculated under clause 5.4.

# 8.2. Congestion uplift payable by or to a declared transmission system service provider

# 8.2.1. Initial operating schedule declared transmission system service provider congestion uplift

The *uplift payment* (in \$) to be paid by a *declared transmission system service provider* for the initial *operating schedule* of the *gas day* is equal to:

- the total "congestion" *uplift payment*, as calculated under clause 7.3, multiplied by
- the sum of the amount calculated under clause 6.3 for all scheduling intervals in the initial operating schedule for the declared transmission system service provider for the initial operating schedule of the gas day,

divided by

• the sum of the total transmission constraint quantity (in GJ) for the initial *operating schedule*, as calculated under clause 6.6.1,

subject to any liability limit provided for under the relevant *service envelope agreement*, where applicable.

Once the liability limit for a *declared transmission system service provider* under the *service envelope agreement* has been reached, the residual liability will be allocated to *Market Participants* pursuant to clause 8.4.



## 8.2.2. Updated operating schedule declared transmission system service provider "congestion" uplift

If the *uplift payment* (in \$) for an updated *operating schedule* is positive, then the *uplift payment* (in \$) to be paid by a *declared transmission system service provider* for that updated *operating schedule* in the *gas day* is equal to:

- the total positive congestion *uplift payment* calculated under clause 7.3 multiplied by
- the positive amount calculated under clause 6.5 for that declared transmission system service provider for that updated operating schedule of the gas day, divided by
- the sum of the positive increase in transmission constraint quantity (in GJ) for that updated operating schedule as calculated under clause 6.6.2 for that declared transmission system service provider for each updated operating schedule of the gas day.

If the *uplift payment* for an updated *operating schedule* is negative, then the *uplift payment* (in \$) to be paid to a *declared transmission system service provider* for an updated *operating schedule* in the *gas day* is equal to:

- the total negative congestion *uplift payment* calculated under clause 7.3 multiplied by
- the negative amount calculated under clause 6.5 for that *declared transmission system* service provider for that reschedule of the *gas day*,

divided by

• the sum of the negative increase in transmission constraint quantity (in GJ) for that updated operating schedule as calculated under clause 6.6.2 for that declared transmission system service provider for each updated operating schedule of the gas day.

subject to any liability limit provided for under the relevant *service envelope agreement*, where applicable.

Once the liability limit for a *declared transmission system service provider* under the *service envelope agreement* has been reached, the residual liability will be allocated to *Market Participants* pursuant to clause 8.4.

#### 8.3. Congestion uplift payable by or to Market Participants

#### 8.3.1. Initial operating schedule "congestion" uplift

The congestion *uplift payment* (in \$) to be paid by a *Market Participant* for the *uplift payment* (in \$) generated in the initial *operating schedule* of the *gas day* is equal to:

 the total congestion uplift payment (in \$) generated in the initial operating schedule of the gas day calculated under clause 7.3

multiplied by

• the sum of the amounts calculated under clause 6.1 for that *Market Participant* for the *scheduling intervals* in the initial *operating schedule* of the *gas day*,

divided by

• the quantity calculated under clause 6.6.1.

#### 8.3.2. Updated operating schedule "congestion" uplift

If the *uplift payment* (in \$) for an updated *operating schedule* is positive, then the "congestion" *uplift payment* to be paid by a *Market Participant* for the uplift generated in each updated *operating schedule* of the *gas day* is equal to:

• the total positive "congestion" *uplift payment* (in \$) generated for that updated *operating* schedule of the gas day; calculated under clause 7.3,



multiplied by

- the sum of the positive amounts calculated under clause 6.4 for that *Market Participant* for the *scheduling intervals* within each *scheduling horizon* of that updated *operating schedule*, divided by
- the quantity calculated under clause a) for that updated *operating schedule*. If the *uplift payment* (in \$) for an updated *operating schedule* is negative, then the "congestion" *uplift payment* to be paid to a *Market Participant* for the uplift generated in each updated *operating schedule* of the *gas day* is equal to:
- the total negative "congestion" *uplift payment* (in \$) generated for that reschedule of the *gas day*; calculated under clause 7.3,

multiplied by

- the sum of the negative amounts calculated under clause 6.4 for that *Market Participant* for the *scheduling intervals* within each *scheduling horizon* of each updated *operating schedule*, divided by
- the quantity calculated under clause b) for that updated operating schedule.

# 8.4. "Common" uplift payable by Market Participant where declared transmission system service provider's liability limit exceeded

If the *uplift payment* due to a failure by a *declared transmission system service provider* to meet its *service envelope agreement* exceeds the *declared transmission system service provider*'s liability limit under its *service envelope agreement* then the amount in excess, as determined under clause 7.5.2, must be paid by *Market Participants*.

The uplift payment (in \$) to be paid by each Market Participant is determined as

- amount of uplift payment (in \$) in excess of the declared transmission system service provider's liability limit, as determined under clause 7.5.2,
   multiplied by
- the total amount of gas (in GJ) withdrawn by that *Market Participant* for that *gas day*, divided by
- the total amount of gas (in GJ) withdrawn by all Market Participants for that gas day.

# 8.5. Common Uplift payable by or to Market Participants for unallocated AEMO demand forecast override

If the *uplift payment* is due to an increase or decrease in AEMO residual *demand forecast* override that cannot be allocated to *Market Participant*s under clause 4.3, then that *uplift* payment must be paid by or to *Market Participant*s and is determined as:

- the amount of common *uplift payment* (in \$) as calculated under clause 7.5.1 multiplied by
- the total amount of gas (in GJ) withdrawn by that *Market Participant* for that *gas day* divided by
- the total amount of gas (in GJ) withdrawn by all Market Participants for that gas day.

## 8.6. Residual Common Uplift payable by or to Market Participants

If there is any residual *uplift payment* (in \$) to be made that cannot be allocated to *Market Participants* or the relevant *declared transmission system service provider* under any other clause, then such residual *uplift payment* must be paid by or to *Market Participants*.

The uplift payment to be paid by or to each Market Participant is determined as

the amount of "common" uplift payment (in \$) as calculated under clause 7.5.3



multiplied by

- the total amount of gas (in GJ) withdrawn by that *Market Participant* for that *gas day* divided by
- the total amount of gas (in GJ) withdrawn by all Market Participants for that gas day.

## 8.7. Total uplift payable by each Market Participant

The total *uplift payment* payable by a *Market Participant* for a *gas day* is the sum of:

- \$ sum for all schedules of surprise uplift payment calculated under clause 8.1;
- \$ sum for all schedules of congestion uplift payment calculated under clause 8.3;
- \$ uplift payments payable by or to Market Participants under clause 8.4;
- \$ sum for all schedules of common *uplift payment* payable by or to *Market Participant*s for AEMO *demand forecast override* not allocated directly to *Market Participant*s calculated under clause 8.5; and
- \$ sum for all schedules of common *uplift payment* payable by or to *Market Participant*s for any residual uplift calculated under clause 8.6.



# SCHEDULE 1. CLOSE PROXIMITY INJECTION POINTS

Authorised MDQ/ AMDQ credit certificate location	System injection points considered to be in close proximity	MIRN
Longford	VicHub	30000167PC
	Esso/BHP	30000001PC
Iona	SEAGas	30000168PC
	Iona Gas Storage	30000154PC
	Otway	30000181PC
	Mortlake	30000197PC
Culcairn	Culcairn	20000001PC
BassGas	BassGas	30000170PC

# SCHEDULE 2. AMIQ PROFILE LIMITS

The following table contains the *AMIQ profile* limits which are also shown in the document "Victorian Gas Market Stage 1 Design Functional Description 3 April 2006".

## **AMDQ Profile Limits**

	Scheduling interval beginning				
	6:00 AM	10:00 AM	2:00 PM	6:00 PM	10:00 PM
Maximum	100%				
Maximum	78.4% 42.6%				42.6%
Maximum	42.6%		42.6%		42.6%
Maximum	25.8%	25.8%	25.8%	25.8%	
Minimum	0.0%	0.0%	0.0%	0.0%	0.0%