



### Reconciliation rules review 27 May 2010

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# Agenda

Scope of rules review Issues identified at this stage Indicative timetable Alternative approach to initial allocation

### Scope

Comprehensive review of the rules s43N assessment required—

- identify reasonably practicable options
- assess benefits and costs, achievement of regulatory objective, and any other matters
- consider non-regulatory alternatives
- consult as required by s43L(1)

### Issues already identified

#### Numerous exemptions are in place:

- direct connect
- global 1-month methodology
- oversized/unmetered gas gates

#### **Rule change register**

- some changes previously dealt with in 2009
- balance were held over for this review

# Issues already identified (rule change register)

#### **TOU data estimates**

- participants seek change to allow estimated "actual daily energy quantities"
- short term problems (e.g. battery failure) cause compliance burden
- boundary issue—
  - $\circ\,$  allocation of UFG to TOU load limited to annual UFG factor
  - at what point should the "estimation" of TOU data cause loss of the AUFG limit?

# Issues already identified (rule change register)

#### **Ongoing fees**

- currently allocated *pro rata* with allocated volumes
- options considered were allocated volumes or ICPs
- Original decision was finely balanced
- On Gas has suggested amending the rules to allocate costs based on:
  - $\circ~$  numbers of ICPs; or
  - 50:50 weighting of numbers of ICPs and allocated volumes



# Issues already identified (rule change register)

#### **Request from Vector to:**

- make the Functional Specification enforceable under the rules
- amend rr19-20 to clarify who the "decision maker" is when determining whether to grant/decline/amend/revoke/extend exemptions
- amend r42 to use "business day" instead of "day"

• may be unnecessary given change to "unvalidated" wording

• better align the rules with current practices

### Indicative timetable



Jun-10

Sep-11

#### Will be a stretch to have new Rules in place for start of 2011/12 gas year

# Ways to improve accuracy of the initial allocation

- 1. Short-term publish SADSV sooner
- 2. Alternative allocation algorithm

# Early publication of SADSV

#### **Staged submission of consumption data:**

- AG1 and AG2 data submitted first
- AA uses injection data, TOU data and AUFG to derive GGRP
- AA publishes SADSV for current consumption month
- Retailers use SADSV when creating historical estimates for AG4 and AG6

# Feasibility?

#### Depends on:

- flexibility within retailers' systems to cope with revised timetable
- industry ability to accommodate extended timeframe for publication of initial allocation by AA
- How soon can AA publish SADSV after midday of bd4
- use of exemptions to delay times for:
  - $\circ\,$  submission of non-TOU consumption data
  - publication of initial allocation

Proposal for alternative allocation algorithm

# Major concern — accuracy of initial allocation

#### **Results of r37.2 consultation varied widely**

- mass market retailers voiced concerns at high cost of narrowing accuracy threshold
- other retailers sought tightening to as low as ±5% & expressed concerns at unfairness of current approach

#### Potentially poor incentives to improve accuracy

- under-submit and only receive a portion of UFG created
- submit accurately and receive higher allocated volumes
- only constraint is perceived threat of r37.2 sanctions

#### Change from Initial to Interim submissions



### Top-down allocation method

# Feasibility of allocation agent performing initial allocation on basis of market share algorithm?

- Strata work indicates insufficient data at this stage
- NZX work on D+1 shows that they can do about as well as current initial allocations, i.e. no improvement

#### Is it worth pursuing this?

- may require, say, 2-3 years of final allocation results
- need for this may reduce with advent of smart meters
- could be needlessly expensive

# Alternative allocation approach

# Determine a "base" level of UFG – allocate that *pro rata* to everyone each month

• e.g. annual UFG or some portion of that

#### Each month, calculate "excess UFG"

• equates to [injections – submissions] – base UFG

Use submission accuracy as the basis for selectively allocating excess UFG to, say, the worst 40%

• requires definition of submission accuracy

Only applies to initial allocation stage, processes for interim and final unchanged

## What would this achieve?

# Current system allocates monthly UFG pro rata with consumption submissions

- UFG caused by one retailer is shared among all
- the reward for greater accuracy is a reduced UFG allocation in proportion to my market share not a large incentive

#### Alternative approach:

- minimises penalties for participants who are already accurate
- rewards improved accuracy
- is incentive-compatible with the purpose of the Rules

# How do we define "submission accuracy"?

#### Proposal

- use the 6-month running average of the difference in initial and interim submissions
- need to use the absolute value of the difference
- clearly there is a lag of four months:
  - the most recent interim result is for consumption month four months ago
  - running average will cover consumption periods from m-4 to m-10

# Is a four to ten month lag a disincentive?

#### Consider the incentives on the least accurate retailer

- Proportionately, that retailer gets the lion's share of excess UFG
- Any improvement reduces excess UFG and benefits that retailer
- Over time, the improved accuracy improves that retailer's ranking:

 $\circ$  if they get out of the bottom 40% they are much better off

 $\circ$  other retailers have more pressure placed on them

### An example algorithm

#### "Rank" retailers in order of descending accuracy

 accuracy = moving average of absolute value of percentage change of retailer's submissions from initial to interim

#### Those in the bottom 40% are allocated excess UFG

#### Allocate excess UFG in proportion to the product of:

- square of the rankings; and
- submission volume

# Example (using 3.5% for base UFG)

	Accuracy				Share of					
	(current	Moving		Rank	gate		Share of	Excess	Base	Retailer
Retailer	month)	Avg	Rank	squared	volume	Weight	excess	UFG	UFG	UFG
								32693.0		
AGCL	5.57%	16.44%	10	100	15.16%	15.16	39.4%	12885.0	1395.0	14280.0
CTCT	18.72%	13.94%	9	81	23.97%	19.42	50.5%	16498.3	1960.9	18459.2
EDNZ	-0.02%	1.01%	2						639.2	639.2
EGAS	-2.90%	3.64%	6						59.1	59.1
EGLT	0.75%	3.44%	5						790.9	790.9
GEND	0.00%	7.08%	7	49	1.78%	0.87	2.3%	739.1	172.4	911.6
GENG	5.26%	2.91%	4						1748.4	1748.4
GNGC	0.97%	0.50%	1						819.0	819.0
GNVG	0.64%	2.39%	3						277.3	277.3
MEEN	10.53%	12.45%	8	64	4.73%	3.03	7.9%	2570.6	415.3	2986.0





# Quick comparison

### **Existing method**

- accurate retailers get UFG caused by others
- poor incentives to improve accuracy
- Benefits of accuracy improvements diluted, rely on others for full benefits

#### **Alternative algorithm**

- inaccurate retailers get most UFG
- strong incentives to improve accuracy
- Accuracy improvements rewarded short and longterm

# Where to from here?

#### Test a range of allocation algorithms

- seeking suggestions from participants
- Test algorithms on live data for a selection of gas gates
  - $\circ\,$  allocations for the 2009/10 gas year
  - range of gate sizes
  - report results either late 2010 or Q1 2011
- Need to consider how to address data from E-Gas