

Subject	Gas (Downstream Reconciliation) Rules 2008 Guideline note rule 61 – guidelines for determinations on profiles
Version	1.0
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1. Introduction

- 1.1 Rule 61 of the Gas (Downstream Reconciliation) Rules 2008 ('the Rules') requires Gas Industry Co to develop and publish guidelines to assist the determination of whether a static deemed profile or a dynamic deemed profile is, or continues to be, a reasonable representation of the actual consumption profile of the consumer installation or class of consumer installations to which it applies.
- 1.2 This note sets out those guidelines – which, under rule 61, the allocation agent must take into account in making a determination on the approval, review, or challenge of static deemed profiles and dynamic deemed profiles under Part 3 of the Rules.¹
- 1.3 This note is explanatory in nature and, though the guidelines in this note must be taken into account by the allocation agent, it is not legally binding. The note needs to be read in conjunction with the Rules and the general approach set out for participants in no way reduces the requirement upon participants to know and comply with their obligations under the Rules.

2. Background

- 2.1 In this guideline note:
 - (a) A *static deemed profile* is a predetermined estimate of daily gas quantities which is used to define the daily profile of consumption during a *consumption period* for the consumer installation or class of consumer installations to which it applies (see rule 55.1).

¹ This guideline note does not address the processes surrounding the referral to Gas Industry Co under rule 64 of dispute regarding a determination on a profile by the allocation agent. These processes are addressed by a separate guideline note '*Guideline note rule 64 – referral to industry body of disputed profile determinations*'.

- (b) A *dynamic deemed profile* is a consumption profile that changes in accordance with information obtained from TOU meters installed at one or more sample consumer installations that are representative of the daily consumption profile of the consumer installation or class of consumer installations to which it is applied (see rule 56.1).
 - (c) A *consumption period* is a month during which gas is supplied to consumers (see rule 5).
- 2.2 Profiles consist of a set of day by day gas quantities over the relevant *consumption periods* in a gas year.
- 2.3 It is noted that:
- (a) Deemed profiles are only applicable to the calculation of daily consumption information for consumer installations in allocation groups 3 and 5. These are generally the so-called 'mass market' meters or non-TOU meters. Profiles are specifically not required for TOU meters.
 - (b) The use of deemed profiles is not mandatory. For non-TOU metered consumer installations without a deemed profile²:
 - (i) when calculating daily consumption quantities, the allocation agent uses the gas gate residual profile (rules 45.2.5 and 45.2.6); and
 - (ii) when calculating historic estimates, retailers must use the relevant seasonal adjustment daily shape values (SADSVs) in lieu of a deemed profile, or if SADSVs for the relevant gas gate are not available for the *consumption period*, retailers can use either a flat straight-line profile or their own seasonal shape methodology (rules 35.1 and 35.3).
 - (c) Deemed profiles are specific to both the consumer installation(s) concerned and the associated retailer. Thus if a consumer installation with a deemed profile and its associated ICP is switched to another retailer, the deemed profile is no longer applicable to that consumer installation. This change must be notified by the retailer to the allocation agent as soon as practicable under rule 57, as it is a change in circumstances material to the registration of the deemed profile. Where a deemed profile covers several consumer installations, a switch by one of those consumer installations is also to be notified to the allocation agent under rule 57 and may result in a review of the deemed profile in relation to the remaining consumer installations.

² Such consumer installations are designated to allocation group 4 or 6. Consumer installations with a registered profile are designated either allocation group 3 (static deemed profile) or allocation group 5 (dynamic deemed profile) – see rules 6 and 29.

3. Determinations in respect of static deemed profiles

3.1 The general process for determinations in respect of the registration of static deemed profiles is as follows.

3.2 *Registration of static deemed profiles (rule 55)*

- (a) **Step 1:** Requests for registering static deemed profiles should be made to the allocation agent in writing, which could be in email form, and should contain the following information:
- (i) A description of the profile;
 - (ii) The period for which the profile is to be applied, ie how many and which months (a minimum of 12 consecutive months is required);
 - (iii) The consumer installation or class of consumer installations to which the profile will apply, the specific ICP(s) proposed to be covered by the profile, and the gas gate(s) that the ICP(s) are supplied from;
 - (iv) The eligibility criteria for consumers to be included in the profile. These criteria must be readily verifiable and must include that all consumers within the profile have similar consumption patterns;
 - (v) The information specified in rule 55.2, including as a minimum the elements making up each ICP's consumption quantities, with the documentation provided to the allocation agent to include a description of the inputs, methodology, formula, and results of any calculations for any estimated data; and

By way of example, information provided should include: details of dynamics derived from sources external to the metering installation if appropriate (eg SCADA); details of any TOU metering used as a control or source of input data to the profile; statistical or engineering data that supports the proposed profile shape; relevant consumer operating information such as hours/days of operation; and information on the operating profile including when the plant involved is warming up, is at full load, or warming down during the week)
 - (vi) Any relevant additional information which should include any external factors that may affect the predictability of the load (or other information reasonably requested by the allocation agent).
- (b) **Step 2:** As required by rule 55.3, the allocation agent will consider whether the proposed profile is a reasonable representation of the consumer installation or class of installations to which it will apply. The criteria and approach to applying the 'reasonable representation' test for static deemed profiles are discussed in section 5 below.

- (c) **Step 3:** The allocation agent must, as soon as practicable and no later than 20 business days after receiving the profile application, determine to either accept or reject the profile application. The allocation agent will advise the applicant in writing of the determination, together with reasons. A suggested format for advising applicants is set out in section 7 below.
- (d) **Step 4:** If the static deemed profile is approved, the allocation agent must record that profile on the register established for this purpose under rule 54.

4. Determinations in respect of dynamic deemed profiles

4.1 The general process for determinations in respect of the registration of dynamic deemed profiles is as follows.

4.2 Registration of dynamic deemed profiles (rule 56)

- (a) **Step 1:** If a retailer wishes to register a dynamic deemed profile, that retailer is to advise the allocation agent in writing, which could be in email form, of the following information:
 - (i) A description of the profile;
 - (ii) The consumer installation or class of consumer installations to which the profile will apply, the specific ICP(s) proposed to be covered by the profile, and the gas gate(s) that the ICP(s) are supplied from; and
 - (iii) The eligibility criteria for consumers to be included in the profile. These criteria must be readily verifiable and must include that all consumers within the profile have similar consumption patterns.
- (b) **Step 2:** The allocation agent shall determine a suitable initial sample size from the list of ICPs proposed to be covered by the profile, along with the required sample accuracy. In determining the sample size and sample accuracy, the allocation agent shall ensure that this determination is informed by relevant statistics expertise, which may be internal or external. The allocation agent will also engage in discussions with Gas Industry Co, retailers and consumers. ICPs to be sampled will be selected at random from the proposed profile population.
- (c) **Step 3:** The applicant shall be responsible for ensuring that TOU meters are installed at the sample ICPs and TOU data will be gathered for those ICPs. The sample consumption information is to be analysed by the applicant for sample accuracy against the accuracy level determined by the allocation agent in step two above. A proposed profile must be evaluated over 12 months (ie over all seasons). However, at the discretion of the allocation agent, the profile may be registered after three months of data have been evaluated, and monitored for the following nine months.

- (d) **Step 4:** Having obtained a minimum of three months of sample data, the profile applicant may then seek registration of a dynamic deemed profile. The retailer must provide the allocation agent with the following information (additional to that provided in step 1 above):
 - (i) The period for which the profile is to be applied, ie how many and which months (a minimum of 12 consecutive months is required);
 - (ii) The information specified in rule 56.2 including, as a minimum, the consumption information from the sample of TOU meters and the retailer's analysis of that consumption information for sample accuracy;
 - (iii) Any relevant additional information which should include any external factors that may affect the predictability of the load (or other information reasonably requested by the allocation agent).
- (e) **Step 5:** As required by rule 56.3, the allocation agent will consider whether the proposed profile is a reasonable representation of the consumer installations or class of installations to which it will apply. The criteria and approach to applying the 'reasonable representation' test for dynamic deemed profiles are discussed in section 5 below.
- (f) **Step 6:** The allocation agent must, as soon as practicable and no later than 20 business days after receiving the profile application, determine to either accept or reject the profile application. The allocation agent will advise the applicant in writing of the determination, together with reasons. A suggested format for advising applicants is set out in section 7 below.
- (g) **Step 7:** If the profile is approved, the allocation agent must record that profile on the register established for this purpose under rule 54.

5. Determining whether profiles are reasonable

5.1 This section identifies general and specific considerations when applying the 'reasonable representation' test to static deemed profiles and dynamic deemed profiles.

5.2 *General points*

- (a) The allocation agent should make an assessment against each of the tests sets out below, accepting that the assessment may be qualitative rather than quantitative in some instances; and
- (b) It is difficult to recommend specific quantitative reference points. In paragraphs 5.3 and 5.4 below some quantitative references are suggested, but these are intended only as examples of a potential starting point and, if appropriate, other reference

points may be used. Should this occur, the allocation agent shall provide in writing the basis for the amended quantitative reference.

5.3 *'Reasonable representation': static deemed profile*

In determining whether the profile is or will be a representation of the actual consumption profile, the allocation agent shall consider the following factors:

- (a) The eligibility criteria for consumers to be included in the profile;
- (b) That the profile methodology uses recognised engineering principles to calculate the consumption information making up the profile shape;
- (c) The average ratio of total gas quantities contained in the profile consumption information to the total gas gate injection quantities (it may be acceptable to have a lower level of accuracy if the profiled quantities are a small percentage of the total injection quantities);
- (d) The extent to which the profile aligns with other profiles for like populations; and
- (e) That the profile can be incorporated into the allocation process.

5.4 *'Reasonable representation': dynamic deemed profile*

In determining whether the profile is or will be a representation of the actual consumption profile, the allocation agent shall consider the following factors:

- (a) The eligibility criteria for consumers to be included in the profile;
- (b) The profiling methodology used and the sample accuracy or the 'degree of fit' between the sample profile population consumption information and the full profile population consumption information (eg a standard of error of 5-10%; a confidence level of 95-99%);
- (c) The accuracy of the profile vis-à-vis the gas gate residual profile (an 'F-test'³ shall be used to evaluate the difference between the sample data and the gas gate residual profile data at the relevant gas gate(s)). Should the result of this analysis not demonstrate that the proposed profile is an improvement over the gas gate residual profile, then options available to the retailer proposing the profile include increasing the sample size, stratification of the sample, and redrawing the profile population;
- (d) The average ratio of total gas quantities contained in the profile consumption information to the total gas gate injection quantities (it may be acceptable to have a lower level of accuracy if the profiled quantities are a small percentage of the total injection quantities);

³ A comparison of two variances or standard deviations

- (e) The extent to which the profile aligns with other profiles for like populations; and
- (f) That the profile can be incorporated into the allocation process.

6. Processes for the review and challenge of registered profiles

6.1 Allocation agent review of registered profile (rule 58)

- (a) **Step 1:** Should the allocation agent decide, at its discretion, to review a registered deemed profile in accordance with rule 58, the allocation agent shall advise the retailer with the profile in writing. The retailer shall provide the information set out in paragraph 3.2(a) or 4.2(a) above (as applicable) within 10 business days of receiving notice of the allocation agent's review. If the allocation agent considers it necessary, it may also request other information from other allocation participants at the gas gate relevant to the review of the profile in question.

Note for population changes to a dynamic deemed profile, the percentage of sampled ICPs (ie those ICPs with TOU meters) must remain equal to or greater than that determined at profile acceptance and registration. The retailer is responsible for ensuring that this occurs on an ongoing basis – specifically, the profile sample is to be updated when the profile population changes by more than 20% since the sample date. To monitor compliance with this requirement, the allocation agent will review each dynamic deemed profile annually against the acceptance criteria for those profiles. The allocation agent will undertake this review under the auspices of rule 58. At the time of commencing this review the allocation agent shall advise the retailer with the profile in writing, which could be in email form.

- (b) **Step 2:** As required by rule 58.4, the allocation agent will consider whether the profile continues to be a reasonable representation of the consumer installation or class of installations to which it applies. The criteria and approach to applying the 'reasonableness' test for static deemed profiles and dynamic deemed profiles are discussed in section 5 above.
- (c) **Step 3:** The allocation agent will make its determination in respect of the profile as soon as practicable, and no later than 30 business days after giving notice under rule 58.2. The allocation agent shall advise the retailer of the allocation agent's determination in writing together with reasons. A suggested format for advising applicants is set out in section 7 below.
- (d) **Step 4:** If the static deemed profile or dynamic deemed profile is considered to no longer be a reasonable representation of the actual consumption profile, the allocation agent must remove that profile from the register established for this purpose under rule 54.

6.2 *Retailer requested review of registered profile (rule 59)*

- (a) Should a retailer with a static deemed profile or a dynamic deemed profile (as registered) request the allocation agent to review that profile in accordance with rule 59 and either:
 - (i) amend that profile; or
 - (ii) amend the characteristics of the consumer installation or class of consumer installations to which it applies;

then the process described immediately in paragraph 6.1 above for rule 58 shall apply (except that the allocation agent will make its determination no later than 20 business days after receiving the request under rule 59.3).

6.3 *Allocation participant challenge of registered profile (rule 60)*

- (a) **Step 1:** Should an allocation participant wish to challenge the use by a retailer of a static deemed profile or dynamic deemed profile (as registered) in accordance with rule 60, the allocation participant must advise the allocation agent in writing of the challenge. The allocation participant shall provide full reasons for the challenge and the information set out in paragraph 3.2(a) above relating to the challenge.
- (b) **Step 2:** The allocation agent will advise, in writing, the retailer whose profile is being challenged of the challenge, providing it with an opportunity to respond. If the retailer wishes to respond, it must provide the relevant information set out in paragraph 3.2(a) or 4.2(a) above on why the profile continues to be a reasonable representation of the actual consumption profile of the consumer installation or class of consumer installations. If the allocation agent considers it necessary, it may also request other information from other allocation participants at the gas gate relevant to the review of the profile in question
- (c) **Step 2:** As required by rule 60.4, the allocation agent will consider whether the profile continues to be a reasonable representation of the consumer installation or class of installations to which it applies. The criteria and approach to applying the 'reasonableness' test for static deemed profiles and dynamic deemed profiles are discussed in section 5 above.
- (d) **Step 3:** The allocation agent will make its determination in respect of the profile as soon as practicable, and no later than 30 business days after receiving the challenge notice under rule 60.1. The allocation agent shall advise the retailer of the allocation agent's determination in writing together with reasons. A suggested format for advising applicants is set out in section 7 below.
- (e) **Step 4:** If the static deemed profile or dynamic deemed profile is considered to no longer be a reasonable representation of the actual consumption profile, the

allocation agent must remove that profile from the register established for this purpose under rule 54.

7. Determination report by allocation agent

7.1 The general format suggested for the determination report of the allocation agent is as follows:

Allocation agent profile determination report	
Name of retailer:	Date of application: Date of decision:
Type of profile:	
Brief characterisation of situation to which the profile applied for refers:	
Profile registration approved/declined or continued/discontinued: (If approved the profile is attached)	
Summary of reasons for decision:	
Extent to which the rule 61 guidelines were taken in account and if they were not followed the reasons why:	
Results of assessment against each of the points listed above for determining whether or not the profile is reasonable:	
Allocation Agent signature:	