



RECONCILIATION AUDIT TRANSGAS

Date of audit: 12-13 February 2025

Report completed: 30 May 2025

Under the Gas (Downstream Reconciliation) Rules 2008 Gas Industry Company commissioned Langford Consulting to undertake a performance audit of Transgas Ltd. The purpose of the audit is to assess compliance with the rules and the systems and processes put in place to enable compliance.

Auditor Julie Langford

Executive Summary

This performance audit was conducted at the request of Gas Industry Company (GIC) in accordance with rule 65 of the Gas (Downstream Reconciliation) Rules 2008.

The purpose of this audit is to assess the systems, processes and performance of Transgas Ltd (Transgas) in terms of compliance with these rules.

The audit was conducted in accordance with terms of reference prepared by GIC, and in accordance with the "Guideline note for rules 65 to 75 and 80: the commissioning and carrying out of performance audits and event audits, V3.0" which was published by GIC in June 2013.

The summary of report findings in the table below shows that Transgas, for the eighteen areas assessed has a control environment of "effective" for ten areas, "acceptable" for one area, "ineffective" for one area and "not relevant" for six areas.

One alleged breach has been raised in relation to the non-submission of billed energy quantities.

The report also makes the following observations/recommendations:

Observation

Transgas are planning system changes which will require notice to be given to GIC and an additional audit of the changes to occur.

Recommendation

The introduction of audit trails should be a priority for the system changes planned by Transgas.

Recommendation

That Bluecurrent and Transgas review their processes to ensure that any changes to gas types by Firstgas are identified and appropriate changes made to the Bluecurrent energy conversion system to reflect the changes.

Recommendation

Transgas should commence supplying GAS070s to the Allocation Agent as soon as practical

Summary of Report Findings

Issue	Section	Control Rating (Refer to Appendix 1 for definitions)	Compliance Rating	Comments
ICP set up information	2.1	Effective	Compliant	There were no new ICPs to review
Metering set up information	2.2	Effective	Compliant	Systems were aligned with the registry
Billing factors	2.3	Acceptable	Compliant	There was a recommendation that Bluecurrent and Transgas review their processes to ensure that changes to gas types by Firstgas are identified
Archiving of reading data	3.1	Effective	Compliant	Meter reading data is available after 30 months.
Meter interrogation requirements	3.2	Effective	Compliant	All sites have TOU metering
Meter reading targets	3.3	Not relevant	Not relevant	
Non-TOU validation	3.4	Not relevant	Not relevant	
Non-TOU error correction	3.5	Not relevant	Not relevant	
TOU validation	3.6	Effective	Compliant	TOU data is validated twice, once by Bluecurrent and once by Transgas
Energy consumption calculation	4	Effective	Compliant	

TOU estimation and correction	5.1	Effective	Compliant	No instances of permanent estimation to date, short term estimates proved to have been made using effective processes
Provision of retailer consumption information	5.2	Effective	Compliant	No issues identified
Initial submission accuracy	5.3	Not relevant	Not relevant	
Historic estimates	5.4	Not relevant	Not relevant	
Proportion of HE	5.5	Not relevant	Not relevant	
Forward Estimates	5.6	Effective	Compliant	Processes were reviewed and found to be reasonable
Billed vs consumption comparison	5.7	Ineffective	Not Compliant	No billed data has been submitted
Gas trading notifications	5.8	Effective	Compliant	The Allocation Agent had been notified

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1. Pre-Audit and Operational Infrastructure Information

1.1 Scope of Audit

This performance audit was conducted at the request of Gas Industry Company (GIC) in accordance with rule 65 of the Gas (Downstream Reconciliation) Rules 2008 (the Downstream rules).

65. Industry body to commission performance audits

65.1 The industry body must arrange at regular intervals performance audits of the allocation agent and allocation participants.

65.2 The purpose of a performance audit under this rule is to assess in relation to the allocation agent or an allocation participant, as the case may be, -

65.2.1 The performance of the allocation agent or that allocation participant in terms of compliance with these rules; and

65.2.2 The systems and processes of the allocation agent or that allocation participant that have been put in place to enable compliance with these rules.

The audit was conducted in accordance with terms of reference prepared by GIC, and in accordance with the “Guideline note for rules 65 to 75 and 80: the commissioning and carrying out of performance audits and event audits, V3.0” which was published by GIC in June 2013.

The engagement was conducted using a series of emails and Teams meetings between 25 November 2024 and 28 February 2025, followed by emails and a Teams meeting with Bluecurrent, who provide data services to Transgas.

The scope of the audit includes “downstream reconciliation” only of Transgas Ltd (Transgas) as a retailer. Switching and registry management functions were audited in conjunction with this audit but are included in a separate report.

Transgas commenced as a retailer registry participant on 9 March 2022 and are responsible for 5 TOU ICPs.

1.2 General Compliance

Transgas is owned by the owners of the ICPs being served, namely Southern Paprika Ltd and Gourmet Paprika Ltd, who each own 50% of the entity.

The contracts to purchase energy are executed separately by the owners of the ICPs, not Transgas. Transgas is responsible for shipping the gas from receipt points to the ICPs and the associated regulatory responsibilities, which in turn are outsourced to Energybridge. It was representatives of Energybridge who were therefore the primary contact for this audit.

1.2.1 Summary of Previous Audit

As Transgas commenced as a registry participant 9 March 2022 they had not been audited previously.

1.2.2 Breach Allegations

There have been no breaches alleged against Transgas.

The following alleged breach has been raised because of this audit:

Section	Participant	Summary of issue	Rules potentially breached
5.7	TRNS	TRNS have not submitted any GAS070s (energy quantities billed)	52.2.1

1.3 Provision of Information to the Auditor (rule 69)

In conducting this audit, the auditor may request any information from Transgas, the Allocation Agent and any allocation participant.

Information was provided by Transgas in a timely manner in accordance with this rule.

The auditor considers that all parties have complied with the requirements of this rule.

1.4 Transmission Methodology and Audit Trails (rule 28.4.1)

The rules require that “The consumption information supplied to the allocation agent in accordance with rules 29 to 40 is transferred and stored in such a manner that it cannot be altered without leaving a detailed audit trail...”

All ICP data is held in a Master Metering Database, which is an Excel workbook. Pivot tables are used to interrogate the database. There is a separate workbook that uses the Master Metering Database data to create the GAS050 consumption information for submission. Metering data is handled by Bluecurrent and arrives via email as an HDR or DDR attachment.

Excel spreadsheets are however prone to human error – either through transposition errors when data is entered or in the ability of the user to change data without a record being maintained.

It should be emphasised that no instances of such errors occurring were found during this audit, but nonetheless the risk remains. The risks are mitigated by embedded checks and management review.

Transgas is actively working on a plan to develop a cloud based database system which would include having an audit trail. The auditor highlighted the need to notify GIC of the system change prior to implementation.

As data services are provided by Bluecurrent who have demonstrated in past audits that their systems have appropriate audit trails, the auditor judged Transgas processes sufficient for now, although recommended more robust audit trails be made a priority in the new system.

Observation

Transgas are planning system changes which will require notice to be given to GIC and an additional audit of the changes to occur.

Recommendation

The introduction of audit trails should be a priority for the system changes planned by Transgas.

2. Set-up and Maintenance of Information in Systems (rule 28.2)

Every retailer must ensure the conversion of measured volume to volume at standard conditions and the conversion of volume at standard conditions to energy complies with NZS 5259:2015, for metering equipment installed at each consumer installation for which the retailer is the responsible retailer.

Compliance with this rule has been examined in relation to the set-up of ICP, metering and billing information. The “Gas (Downstream Reconciliation) Rules 2008 Billing factors guideline note, V2.0” (Billing Factors Guideline) published by GIC on 30/11/15 was also considered when examining the set up and maintenance of information.

2.1 ICP Set Up Information

The registry shows Transgas ICPs all have correctors, one is shown as allocation group 2, the others are allocation group 1.

2.1.1 New Connections Process

Transgas have not set up any new connections.

2.1.2 Altitude Information

It is a distributor responsibility to populate the registry with correct altitude information to support compliance with NZS 5259:2015, and it is a retailer responsibility to comply with NZS 5259:2015 for the conversion of volume to energy.

An LIS file for TRNS was reviewed for inaccurate altitude factors against Google Earth. No inaccuracies greater than might cause an error in energy conversion outside of the allowable +/- 1% maximum permissible error were found.

2.2 Metering Set-up Information

The records in the Bluecurrent system were compared against the information in the registry. No differences were identified.

2.3 Billing Factors

2.3.1 Temperature Information

As all the TRNS ICPs have correctors there is no need for TRNS to introduce temperature into their data processes.

2.3.2 Calorific Values

Bluecurrent download gas composition data from the Open Access Transmission Information System (OATIS) for use in the energy conversion. As a part of the review of the Bluecurrent processes it was identified that they were not aware of the update to gas types Firstgas had made in June 2024. However, it should be noted that the changes made by Firstgas did not directly affect the TRNS ICPs, so there is no risk of any inaccuracies in the energy conversion of TRNS sites.

Recommendation

That Bluecurrent and Transgas review their processes to ensure that any changes to gas types by Firstgas are identified and appropriate changes made to the Bluecurrent energy conversion system to reflect the changes.

3. Meter Reading and Validation

3.1 Archiving of Register Reading Data (rule 28.4.2)

Retailers are required to keep register reading data for a period of 30 months. Data was examined during the audit and it is confirmed that meter reads are available 30 months after their date of origin.

Sample meter read data was also verified against the data used as the meter read input for the energy calculation to help prove the end-to-end process.

3.2 Metering Interrogation Requirements (rule 29)

Rule 29 specifies the type of metering (TOU or non-TOU) that must be installed at a consumer installation, the relevant allocation group that the consumer installation falls within and the interrogation requirements that apply depending on the type of metering and allocation group.

Transgas' ICPs all have TOU metering, so no routine checking of usage against allocation group thresholds is required to assess a change in allocation group.

3.3 Meter Reading Requirements (rules 29.4.3, 29.5 & 40.2)

All consumer installations with non-TOU meters must have register readings recorded at least once every 12 months unless exceptional circumstances prevent such an interrogation (rule 29.4.3).

Transgas only have TOU ICPs so do not need to have processes for compliance with these rules.

3.4 Non-TOU Validation

Transgas does not have any non-TOU sites to validate.

3.5 Non-TOU Error Correction

Transgas does not have any non-TOU sites.

3.6 TOU Validation

The Bluecurrent team perform validations on Transgas' data and send it to Transgas daily, so anything unusual is likely to be identified within the month and resolved before the month end.

Transgas also perform data validations. The day's data is added into a forecasting tool used for nominations so is always reviewed every day. The team are in regular contact with operations to be made aware of any operational issues which impact on expected gas use.

The largest ICP (approximately two thirds of the total Transgas load) is based at Warkworth and is approximately 95% of the gas gate load. The transmission data for the Warkworth gas gate is therefore used as a daily comparison to identify and then investigate any surprises.

No issues were found with the validation processes.

4. Energy Consumption Calculation (rule 28.2)

Transgas doesn't perform any energy conversion calculations as their data management is done by Bluecurrent who provide Transgas with HDR and DDR data. Bluecurrent's Flow2E system has previously been audited as being compliant with NZS5259 so a complete audit was not repeated as a part of this audit. However, the auditor confirmed that:

- The files Bluecurrent held as final validated data were the same as that held by Transgas and as used by Transgas to create submission files.
- The data validation processes were still being completed, as previously audited
- The use of OATIS for gas composition data had not changed
- That the altitude factors used for TRNS ICPs matched those in the registry, as were the gas gates recorded in the Bluecurrent system

- Bluecurrent also supplied a sample of data as received from the TRNS sites and as used as input into their system. The auditor selected one of these to validate the data in against the DDR out, to confirm the energy calculation.

5. Estimation and Submission Information

5.1 TOU Estimation and Correction (rule 30.3)

Transgas does have instances where the DDR available at the time the initial submission file is due does not have data for the whole month, meaning an estimate is required. The most common occurrence is for Main as the telemetry can be unreliable. There are also issues with Waiuku as the meter is not owned by Bluecurrent and there are sometimes delays in the meter owner sending the data to Bluecurrent for processing, however as the ICP at Waiuku is the only ICP at the gas gate Transgas are able to use the DDR data for the transmission gate as the estimate. If any other ICP requires an estimate the D+1 data is used.

Where an estimate is submitted it is marked with an E and the data is sorted so the E data is at the top of the data set as a reminder that it needs to be revised at the next submission round.

To date there have not been any estimates remaining at the interim submission stage and there have been no permanent data corrections.

5.2 Provision of Retailer Consumption Information (rules 30 to 33)

A sample check of DDRs, as supplied by Bluecurrent, was validated against TRNS submission files, which were confirmed as accurate. There were no differences between the initial and interim submission files for the selected sample period.

Transgas doesn't have any INACT ICPs so there is no risk that consumption by any INACT site could have been missed from submission files.

5.3 Initial Submission Accuracy (rule 37.2)

Rule 37.2 sets requirements for allocation groups 3 to 6 which are not relevant to Transgas ICPs in allocation group 1 and 2.

5.4 Historic Estimates (Rules 34 & 35)

This rule relates to allocation groups 3 to 6 so does not affect TRNS ICPs.

5.5 Proportion of Historic Estimates (rule 40.1)

This rule relates to allocation groups 3 to 6 so does not affect TRNS ICPs.

5.6 Forward Estimates (rules 34 & 36)

The rules do not prescribe how forward estimates are to be calculated. The need for forward estimates are rare as TRNS ICPs are TOU. However, where estimates have been required TRNS were found to have used a reasonable methodology.

5.7 Billed vs Consumption Comparison (rule 52)

Transgas is not responsible for sourcing the gas for its clients/owners, they do this themselves directly from the market.

Due to these unusual arrangements, there is no invoice for gas to the customer from Transgas and Transgas had understood that it did not need to submit GAS070 'as billed' quantities. The auditor checked with the current Allocation Agent and they were not aware that Transgas had been given permission not to submit them.

- 52.1** The purpose of an **annual reconciliation** is to verify, on a monthly basis, the accuracy and completeness of consumption information provided to the **allocation agent** for the previous 12 billing months against the energy quantities billed to consumers during that period.

To provide general reassurance that the consumption information provided to the Allocation Agent does accurately represent the energy quantities used by the consumer the auditor performed an additional reconciliation of GAS050s against the energy quantities purchased, as well as reconciling the consumption data back to the original metering data.

After allowing for gas swaps and transmission system cashouts the gas volumes purchased almost exactly matched the submitted consumption data for the selected period.

However, the check of data submitted to the Allocation Agent against the amount of gas actually bought by the end gas user as envisaged by rule 52 is an important check, providing other participants with reassurance.

Recommendation

Transgas should commence supplying GAS070s to the Allocation Agent as soon as practical.

Alleged Breach

No submission of GAS070s, energy quantities billed		
Non-compliance	Description	
<p>Report section: 5.7</p> <p>Rule: 52.2.1</p> <p>From: commencement as a participant in March 2022</p> <p>To: Date of the audit</p>	<p>Audit history: N/A</p> <p>Controls: Ineffective (i.e. none)</p> <p>Impact: Moderate</p>	<p>TRNS have not submitted any GAS070s (energy quantities billed)</p> <p>Although there has not been any direct financial impact on other participants, the impact has been judged as “moderate” because of the lack of assurance resulting. This is a risk to the integrity of the reconciliation system and creates a risk for all participants.</p>
Remedial action rating	Remedial timeframe	Remedial comment
In progress	As soon as practical	The audit has established there has been no impact on other participants to date, but the provision of GAS070s is an important safeguard and should be provided for the assurance of other participants
Audited party comment		
The circumstances of the matters outlined in the breach notice.	As Transgas isn't a traditional retailer it wasn't immediately apparent that Rule 52 applied as the Transgas doesn't bill energy quantities, instead providing the service of transporting third party gas to an ICP.	
Whether or not the participant admits or disputes that it is in breach.	Trangas disputes that it is in breach of Rule 52 due to no energy quantity being billed, however it can accept that the purpose of Rule 52 isn't being met.	
Estimate of the impact of the breaches (where admitted).	The impact of this alleged breach is considered negligible as Transgas serves a limited number of TOU sites where the UFG is assigned.	
What steps or processes were in place to prevent the breaches?	None	
What steps have been taken to prevent recurrence?	Going forward Transgas will commence submitting GAS070 files as soon as practicable based on an analogous metric.	

5.8 Gas Trading Notifications (Rule 39)

A retailer must give notice to the Allocation Agent when they commence, amend or cease gas supply under a supplementary agreement to a transmission services agreement. They must do

this by the third business day of the month following the relevant consumption month of the change.

Transgas is party to a supplementary agreement for gas being shipped to Warkworth. Evidence was supplied of the notification of this to the Allocation Agent.

6. Conclusion

The audit found that Transgas, for the eighteen areas assessed, has a control environment of “effective” for ten areas, “acceptable” for one area, “ineffective” for one area and “not relevant” for six areas.

One alleged breach has been raised in relation to the non-submission of billed energy quantities.

The report also makes the following observations/recommendations:

Observation

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Recommendation

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Appendix 1 – Control rating definitions¹

Rating	Definition
Ineffective	<ul style="list-style-type: none"> The design of controls <u>overall is ineffective</u> in addressing key causes and/or consequences. Documentation and/or communication of the controls <u>does not exist</u> (e.g. policies, procedures, etc.). The controls are <u>not in operation</u> or have not yet been implemented.
Needs improvement	<ul style="list-style-type: none"> The design of controls <u>only partially</u> addresses key causes and/or consequences. Documentation and/or communication of the controls (e.g. policies, procedures, etc.) are <u>incomplete, unclear, or inconsistent</u>. The controls are <u>not operating consistently</u> and/or effectively and have not been implemented in full.
Acceptable	<ul style="list-style-type: none"> The design of controls is <u>largely adequate and effective</u> in addressing key causes and/or consequences. The controls (e.g. policies, procedures, etc.) <u>have been formally documented</u> but <u>not proactively communicated</u> to relevant stakeholders. The controls are <u>largely operating in a satisfactory manner</u> and are providing some level of assurance.
Effective	<ul style="list-style-type: none"> The design of controls is <u>adequate and effective</u> in addressing the key causes and/or consequences. The controls (e.g. policies, procedures, etc.) have been <u>formally documented and proactively communicated</u> to relevant stakeholders. The controls overall, are <u>operating effectively</u> so as to manage the risk.

¹ All relevant systems and processes in place

Appendix 2 – Impact rating definitions²

Rating	Definition
Insignificant	<ul style="list-style-type: none"> • A <u>small number of issues</u> with registry file timeliness and/or accuracy. <u>Negligible impact</u> on other participants or consumers. <u>Did not prevent</u> the process completing. • A <u>small number of issues</u> with the accuracy and/or timeliness of files to the Allocation Agent. Corrections <u>were</u> made by the interim allocation. A <u>small number of issues</u> not related to registry or allocation information.
Minor	<ul style="list-style-type: none"> • <u>Some issues</u> with registry file timeliness and/or accuracy. <u>Minor impact</u> on other participants or consumers. <u>Did not prevent</u> the process completing. • <u>Some issues</u> with the accuracy and/or timeliness of files to the Allocation Agent. Corrections <u>were</u> made by the interim allocation. A <u>small number of issues</u> not related to registry or allocation information.
Moderate	<ul style="list-style-type: none"> • A <u>moderate number of issues</u> with registry file timeliness and/or accuracy. <u>Moderate impact</u> on other participants or consumers. <u>Did prevent</u> some processes completing. • A <u>moderate number of issues</u> with the accuracy and/or timeliness of files to the Allocation Agent. Corrections <u>were not</u> made by the interim allocation. A <u>moderate number of issues</u> not related to registry or allocation information.
Major	<ul style="list-style-type: none"> • A <u>significant number of issues</u> with registry file timeliness and/or accuracy. <u>Major impact</u> on other participants or consumers. <u>Did prevent</u> some processes completing. • A <u>significant number of issues</u> with the accuracy and/or timeliness of files to the Allocation Agent. Corrections <u>were not</u> made by the interim allocation. A <u>significant number of issues</u> not related to registry or allocation information.

² These ratings are indicative and will be used as a guide only, to aid the Market Administrator's assessment of alleged breaches.

Appendix 3 – Remedial rating definitions

Rating	Definition
Completed	The alleged breach and impact have been resolved. Systems and processes are now compliant.
In progress	Steps are being taken to resolve the alleged breach and impact and ensure systems and processes are compliant.
No action	Participant undertakes no action to resolve or address auditor controls or impact assessments for commercial reasons.