



# SYSTEM CHANGE AUDIT VECTOR GAS TRADING LTD

Date of commencement: 18 January 2023

Report completed: 5 April 2023

Under the Gas (Downstream Reconciliation) Rules 2008 the Gas Industry Company commissioned Langford Consulting to undertake a performance audit of Vector Gas Trading Ltd. The purpose of the audit is to assess whether, after the implementation of proposed system changes, the retailer will be able to be compliant with the rules.

Auditor Julie Langford

## Executive Summary

This performance audit was conducted at the request of the Gas Industry Company (GIC) in accordance with rule 65 of the 2015 Amendment Version of the Gas (Downstream Reconciliation) Rules 2008 effective from September 2015. The audit was commissioned under rule 65.5 and its scope was therefore limited by rule 65.6 to the impact of the system change proposed change proposed by Vector Gas Trading Ltd (OnGas) on the allocation agent or allocation participant's systems, processes and procedures.

The audit was conducted 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 the GIC in June 2013.

The engagement commenced on 18 January 2023 and was conducted remotely without a site visit.

The purpose of the audit is to assess whether, after the implementation of the intended change, OnGas will be able to be compliant with the rules.

The auditor found no issues during the audit that should prevent the OnGas plan to 'go live' with the new system. It is anticipated that after the implementation of the intended change OnGas will be able to be compliant with the rules.

One alleged breach has been raised as a result of this audit. The alleged breach related to existing processes so did not prevent the proposed system change from proceeding.

Breach Allegation	Rules	Section in this report
Submission of incorrect interim consumption information due to the removal of meter readings from Gentrack after the reversal of an invoice.	26.2.1	3

The following recommendations were made:

**RECOMMENDATION:** That the new business process for keeping Apollo and Gentrack TOU data aligned be reviewed to ensure it has been systematically applied as a part of the next routine audit.

**RECOMMENDATION:** That OnGas identify any other examples of accidental billing followed by a reversal that have occurred in the last 12 months and examine the associated reads in Gentrack, to identify if Gentrack has any other missing reads.

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# **1. Pre-Audit and Operational Infrastructure Information**

## **1.1 Proposed System Change and Scope of Audit**

Under the Gas (Downstream Reconciliation Rules) Rules 2008 (the Rules) the Gas Industry Company (GIC) has commissioned Langford Consulting to undertake a performance audit of Vector Gas Trading Ltd (OnGas) in its role of retailer. The audit was commissioned under rule 65.5 and its scope was therefore limited by rule 65.6 to the impact of the proposed change on the allocation agent or allocation participant's systems, processes and procedures.

The purpose of the audit is to assess whether, after the implementation of the intended change, OnGas will be able to be compliant with the rules.

In preparing the report, the auditor used the processes set out in the guideline note issued on 1 June 2013: *Guideline note for rules 65 to 75: the commissioning and carrying out of performance audits and event audits, version 3.0* (<http://www.gasindustry.co.nz/dmsdocument/2858>).

OnGas informed the GIC that they proposed to make a system change that affects its processes for the supply of information to the Allocation Agent under the Rules. The GIC asked the auditor to make enquiries about the nature of the proposed change and assess the risks to be reviewed. OnGas had recently undergone routine audits for both the downstream reconciliation and switching and registry processes so this audit is contained to the risks associated to the system change.

## **1.2 Audit approach**

OnGas currently use Gentrack for billing and the production of Allocation Agent reports. However, they use Flow2E for their energy calculation and replicate their Gentrack data in a SQL database with an Access front end, known as Apollo, for validation and BI purposes. Vector use Flow2E and Apollo for providing services to other retailers, including the creation of Allocation Agent reports. These systems were audited recently (2021/early 2022) both in the context of the service provided to other retailers, and for OnGas as retailer.

OnGas propose to stop using Gentrack to generate Allocation Agent reports and to use Apollo instead. They will, however, continue to use Gentrack for billing.

The risk areas for the system change were evaluated by the auditor. The resulting approach to the audit was proposed and agreed by OnGas and the GIC as follows:

- A parallel run to demonstrate the Gentrack and the SQL database files are the same
- Evidence of their being processes in place to ensure the data in Gentrack and the SQL database are aligned, including any historical corrections/re-billing

## **1.3 Provision of Information to the Auditor (rule 69)**

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

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

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

## 2. The Parallel Run

Ongas undertook a parallel run of Gentrack against Apollo in February and supplied the resulting files and their analysis of differences between the files, to the auditor for review. The suite of files arising encompassed:

- initial files for January 2023
- interim files for September 2022
- final files for December 2021

Control spreadsheets were also supplied for the initial and the interim/final processes, which included a comparison of Gentrack and Apollo.

OnGas reported that there will always be differences in the initial files between Apollo and Gentrack because they use different methods for forward estimates. As there is no prescribed methodology this is acceptable. The approach taken by Apollo for forward estimates had already been reviewed as a part of a recent audit relating to the services provided to other retailers, so this review was not repeated.

The parallel run found some differences remaining at the interim stage. Initially it was thought this was due to a change to the SADSV, but further examination discovered it was due to some reads missing from Gentrack. This was an outcome of an accidental billing followed by a reversal, a process mistake which resulted in Gentrack behaving in a way it should not have.

**ALLEGED BREACH:** Submission of incorrect interim consumption information due to the removal of meter readings from Gentrack after the reversal of an invoice (r26.2.1)

See Appendix 2 for alleged breach detail.

**RECOMMENDATION:** That OnGas identify any other examples of accidental billing followed by a reversal that have occurred in the last 12 months and examine the associated reads in Gentrack, to identify if Gentrack has any other missing reads.

However, as this was an issue with the existing system that was identified as a part of the transition, rather than a problem with the proposed system, this was not an issue that should hold up the system change.

The parallel run of final files was well aligned with only de minimis differences.

The auditor concluded that the proposed change would enable OnGas to be compliant with the rules and proposed they go ahead with the new system in the following month (March 2023), but as an additional control do a second parallel run with Gentrack, followed by a repeat of the analysis to identify differences between the two systems.

OnGas used the new system for their March processes, but continued to run the Gentrack process and perform the comparison analysis to look for differences. The interim and final outcomes were identical and no issues were identified.

### 3. New process for keeping TOU data synchronised

One risk with the system change is that OnGas haven't been using Apollo previously for TOU data as a part of its services to other suppliers.

OnGas supplied the auditor with a new report workbook created to keep Gentrack and Apollo TOU data synchronised. The workbook compares what is in Apollo production and Gentrack. At the time of the parallel run the workbook had identified one ICP which had a different quantity for 1 day which was then reviewed and aligned.

Below is the process OnGas will follow to align any such differences.

1. HDR data processed by TOU Data Analyser and once user is happy, exported to Gentrack
2. HDR changed for whatever reason in Flow2E, automatically sent to Apollo, Gentrack not updated
3. User manually runs the report for previously billed month(s) to review any change in HDR data, by showing differences between Apollo and Gentrack
4. User reviews changes, figures out which data set is correct for each ICP and day
5. Once the correct data set has been identified, get Apollo and Gentrack to match (so that the site doesn't appear on subsequent reports)
  - a. either upload the latest HDR file to Gentrack so that Gentrack has the new data
  - b. or reprocess original consumption through Flow2E so that Apollo has the previous data
  - c. or both, if both original and new data is correct for different parts of the month
6. Difference billed to customer via one-off line item process on subsequent invoice

The auditor was content with the process and recommends that this be a specific focus for the next routine audit, to ensure it has been followed and proven as effective.

**RECOMMENDATION:** That the new business process for keeping Apollo and Gentrack TOU data aligned be reviewed to ensure it has been systematically applied as a part of the next routine audit.

### 4. Conclusion

The auditor found no issues during the audit that should prevent the OnGas plan to 'go live' with the new system. It is anticipated that after the implementation of the intended change OnGas will be able to be compliant with the rules. The proposed controls were expected to be effective.

One alleged breach has been raised as a result of this audit. The alleged breach related to existing processes so did not prevent the proposed system change from proceeding.

Breach Allegation	Rules	Section in this report
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The auditor made the following recommendations:

**RECOMMENDATION:** That the new business process for keeping Apollo and Gentrack TOU data aligned be reviewed to ensure it has been systematically applied as a part of the next routine audit.

**RECOMMENDATION:** That OnGas identify any other examples of accidental billing followed by a reversal that have occurred in the last 12 months and examine the associated reads in Gentrack, to identify if Gentrack has any other missing reads.

## Appendix 1 – Control Rating Definitions

Control Rating	Definition
Control environment is not adequate	<p>Operating controls designed to mitigate key risks are not applied, or are ineffective, or do not exist.</p> <p>Controls designed to ensure compliance are not applied, or are ineffective, or do not exist.</p> <p>Efficiency/effectiveness of many key processes requires improvement.</p>
Control environment is adequate	<p>Operating controls designed to mitigate key risks are not consistently applied, or are not fully effective.</p> <p>Controls designed to ensure compliance are not consistently applied, or are not fully effective.</p> <p>Efficiency/effectiveness of some key processes requires improvement.</p>
Control environment is effective	<p>Isolated exceptions identified when testing the effectiveness of operating controls to mitigate key risks.</p> <p>Isolated exceptions identified when testing the effectiveness of controls to ensure compliance.</p> <p>Isolated exceptions where efficiency/effectiveness of key processes could be enhanced.</p>



## Appendix 2 – Alleged Breach Detail

ICP	Apollo read Total (Sep and Oct 2022)	GTV read Total (Sep and Oct 2022)	Variance between Apollo read - GTV read
0001431048QT128	504.091	252	252.091
0000386631QT5F9	819.263	405.289	413.974
0000343341QT631	67.785	33.533	34.252
0000013751QTF5D	69.69	34.597	35.093
0000381411QT6CB	1220.503	630.075	590.428
0000344311QTA59	71.047	36.862	34.185
0001431047QTEF6	216.931	130.61	86.321