VERITEK

Gas Registry and Switching Performance Audit Final Report

For

Mercury NZ Limited

Prepared by

Steve Woods: Veritek Limited

Date of Audit: 11/05/17 & 12/05/17

Date Audit Report Complete: 19/08/17

Executive Summary

This Performance Audit was conducted at the request of the Gas Industry Company (GIC) in accordance with Rule 88 of the Gas (Switching Arrangements) Rules 2008 in effect from 14 September 2015.

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

The audit was conducted in accordance with terms of reference prepared by the GIC.

The summary of report findings in the table below shows that Mercury's control environment is "effective" for eight of the areas evaluated and adequate for six areas.

Six of the 14 areas evaluated were found to be compliant. Nine breach allegations are made in relation to the seven areas found to be not compliant. They are summarised as follows:

- The registry was not populated within two business days for 479 ICPs.
- Registry updates are not all occurring as soon as practicable.
- The best endeavours threshold has not been met in relation to meter pressure corrections.
- A small number of switch files were sent late, in error, or with incorrect content.

As a result of this performance audit I recommend the following:

- That Mercury periodically checks ICPs at the Ready status with metering installed to ensure they are changed to Active within the required timeframes.
- The list file contained 210 ICPs at the ready status where Mercury was the expected retailer. 32 ICPs were created prior to 01/01/16. 65 ICPs were created during 2016 and the remaining 113 were created during 2017. I recommend Mercury periodically analyses all ICPs at Ready for more than six months to identify ICPs which can be decommissioned or ICPs which should be ACTC.
- The annualised consumption figure is recorded as zero in some examples where GTN records are manually created in the registry. The annualised consumption figure is incorrectly higher than the actual consumption in cases where there has been a meter rollover during the period the ICP was held by Mercury. I recommend both of these matters are addressed.

Summary of Report Findings

Issue	Section	Control Rating (Refer to Appendix 1 for definitions)	Compliance Rating	Comments
Participant registration information	2	Effective	Compliant	Participant registration information is correct.
Obligation to act reasonably	3	Effective	Compliant	No examples of Mercury acting unreasonably were found.
Obligation to use registry software competently	4	Effective	Compliant	No examples of Mercury using registry software incompetently were found.
ICP identifier on invoice	5	Effective	Compliant	The ICP identifier is shown on Mercury's invoices.
Uplift of READY ICP	6	Adequate	Not compliant	The registry was not updated within two business days for approximately 90% of new connections. Two recommendations are made to improve monitoring of ICPs at the Ready status.
Maintenance of ICP information in registry	7	Adequate	Not compliant	Not all registry updates were made within a reasonable timeframe.
Resolving discrepancies	8	Adequate	Not compliant	This rule requires the responsible retailer to use "best endeavours" to resolve discrepancies between their data and registry data. I have concluded that the best endeavours threshold has not been met by Mercury because the meter pressure corrections are not applied to the correct periods of inaccuracy
Initiation of consumer switch/switching notice	9.1	Effective	Compliant	No issues were found with this process.

Issue	Section	Control Rating (Refer to Appendix 1 for definitions)	Compliance Rating	Comments
Response to a gas switching notice	9.2	Effective	Not compliant	One late response sent to the registry.
Gas acceptance notice	9.3	Adequate	Not compliant	Some GAN files with incorrect response codes.
Gas transfer notice	9.4	Adequate	Not Compliant	Some incorrect fields in GTN files A recommendation is made to ensure the annualised consumption field is populated accurately.
Accuracy of switch readings	9.5	Effective	Compliant	Switch readings are accurate.
Gas switching withdrawal	9.6	Adequate	Not compliant	Some GNW files were sent in error and some GAW files were sent late.
Switch reading negotiation	9.7	Effective	Not compliant	One GAC file was sent late.

Persons Involved in This Audit

Auditors:

Steve Woods
Veritek Limited

Tara Gannon
Veritek Limited

Mercury personnel assisting in this audit were:

Name	Title
Barbara O'Connor	Connection Centre Manager
Kiryn Savage	Switch Analyst
Chris Posa	Compliance and Process Improvement Coordinator
Rachel Fogl	Compliance and Process Improvement Coordinator

Contents

1. Pre-Audit and Operational Infrastructure Information

1.1 Scope of Audit

This Performance Audit was conducted at the request of the GIC in accordance with Rule 88 of the Gas (Switching Arrangements) Rules 2008 in effect from 14 September 2015.

88. Industry body to commission performance audits

88.1 The industry body must arrange performance audits of registry participants at intervals of no greater than five years.

88.2 The purpose of a performance audit under this rule is to assess in relation to the roles performed by a registry participant -

88.2.1 The performance of the registry participant in terms of compliance with these rules; and

88.2.2 The systems and processes of that registry 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.

The audit was carried out at Mercury's premises in Auckland on May 11th and 12th 2017.

The scope of the audit includes compliance with the "switching arrangements" rules only. There is a separate report for downstream reconciliation.

1.2 Audit Approach

As mentioned in Section 1.1 the purpose of this audit is to assess the performance of Mercury in terms of compliance with the rules, and the systems and processes that have been put in place to enable compliance with the rules.

This audit has examined the effectiveness of the controls Mercury has in place to achieve compliance, and where it has been considered appropriate sampling has been undertaken to determine compliance.

Where sampling has occurred, this has been conducted using the Auditing Standard 506 (AS-506) which was published by the Institute of Chartered Accountants of New Zealand. I have used my professional judgement to determine the audit method and to select sample sizes, with an objective of ensuring that the results are statistically significant.[1]

Where compliance is reliant on manual processes, manual data entry for example, the sample size has been increased to a magnitude that, in my judgement, ensures the result has statistical significance.

Where errors have been found or processes found not to be compliant, the materiality of the error or non-compliance has been evaluated.

[1] In statistics, a result is called statistically significant if it is unlikely to have occurred by chance. (Wikipedia)

1.3 General Compliance

1.3.1 Summary of Previous Audit

This is the first audit for Mercury under the Gas (Switching Arrangements) Rules 2008.

1.3.2 Breach Allegations

Mercury has the following breaches recorded by the Market Administrator for the audit period.

Rule requirement	Rule	Quantity
Completion of switch within 10 business days.	69.2	8
Response to a switch request within two business days.	69.1	1
Response to a switch request within two business days, and response to a GNC within five business days.	69.1, 81.1	1
Response to switch withdrawal notice within five business days.	78.1	4
Response to switch withdrawal notice within five business days, and response to a GNC within five business days.	78.1, 81.1	1
Switch withdrawal.	75.1.1	1

As noted in the Summary of Report Findings, non-compliance was found in relation to three sections of this audit. Breach allegations are made in relation to these matters, as follows:

Breach Allegation	Rule	Section in this report
Registry not populated within two business days for 479 ICPs.	54.1	6
Registry updates not occurring as soon as practicable.	61.1	7
Meter pressure discrepancies not corrected for the entire period of inaccuracy.	62.1	8
One late response to a gas switching notice.	69.1	9.2
Incorrect GAN file content.	70.3	9.3

Incorrect data in some GTN fields	72.1.6, 72.1.7, 72.1.8(a) and 72.1.8(b)	9.4
Switch withdrawal notices sent in error..	75.1	9.6
Four late GAW files.	78.1	9.6
One late GAC file.	81.1	9.7

1.4 Provision of Information to the Auditor (Rule 91)

In conducting this audit, the auditor may request any information from Mercury, the industry body and any registry participant.

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

1.5 Draft Audit Report Comments

A draft audit report was provided to the industry body (GIC), the registry operator, and registry participants that I considered had an interest in the report. In accordance with rule 92.3 of the 2015 Amendment Version of the Gas (Switching Arrangements) Rules 2008, those parties were given an opportunity to comment on the draft audit report and indicate whether they would like their comments attached as an appendix to the final audit report. The following responses were received.

Party	Response	Comments provided	Attached as appendix
Mercury	Yes	Yes	Included in body of report
Metrix	Yes	No	No
Gas Industry Company	Yes	Yes	No

The comments received were considered in accordance with rule 93.1, prior to preparing the final audit report. No changes were made to the report as a result of the comments.

2. Participant Registration Information (Rules 7 and 10)

All registry participants must supply registration information to the registry operator. Registration information consists of:

- the name of the registry participant; and
- the registry participant's telephone number, physical address, facsimile number, email address, and postal address; and
- identification as to which class, or classes, of registry participant (retailer, distributor or meter owner) that the registry participant belongs.

Registration information must be given in the form and manner required by the registry operator as approved by the industry body. Every person who is a registry participant at the commencement date must supply the registration information within 20 business days of the commencement date. Every person who becomes a registry participant after the commencement date must supply the registration information within 20 business days of becoming a registry participant.

Mercury has supplied accurate registration information. Compliance is confirmed.

3. Obligation to Act Reasonably (Rule 34)

No examples of Mercury acting unreasonably were found.

4. Obligation to Use Registry Software Competently (Rule 35)

No examples of Mercury using registry software incompetently were found.

5. ICP Identifier on Invoice (Rule 36)

The ICP identifier is shown on Mercury's invoices.

6. Uplift of Ready ICP (Rule 54)

The process was examined for the connection and activation of new ICPs.

New connections are managed via the networks' portals. Progress notifications are automatically generated and the relevant details are loaded into SAP.

One of the main issues with the new connections process is that the physical connection is made at the property when the ICP is still at the "Ready" status. At this point the consumer hasn't always registered with a retailer, even though gas is being consumed. Because networks will create ICPs based on a request from the customer, the retailer is not always included in the communication process.

When an ICP is established in SAP for a proposed new connection a "proposed connection date" field is populated. Monitoring is in place to identify those ICPs where this date has passed without the receipt of a livening notification. There is also monitoring of situations where a livening notification has been provided but a meter docket has not been received. Customer identification and registration is managed by outbound calling to "register" the customer at the time the ICP is first established for the proposed new connection. This process includes appropriate steps to minimise the late notification to the registry and to ensure consumption information is provided to the allocation agent at the earliest opportunity.

Customers moving into properties with a status of ACTV are often only identified once the meter reading process has identified consumption.

Because of the potential delays with the registry update, for some ICPs where the status has changed to ACTC consumption information has not been provided to the allocation agent for the initial allocation. I checked ten of 19 ICPs where the update to the registry was later than 20 business days and I found that submission of consumption information to the allocation agent occurred at the beginning of the following month for three of ten. For the remaining seven ICPs, submission information was not provided for the initial allocation and for one ICP, submission information was not provided for the interim allocation. Field notification was late for all ten ICPs checked. For one ICP there was no field notification and the distributor advised Mercury that the ICP needed to be claimed. For another ICP, the registry had metering information populated despite the status being at "Ready". I recommend Mercury periodically checks ICPs at Ready with metering installed. This can be checked with a list file including the Ready status. A list file was checked during the audit and it was found that one ICP had metering installed on 14/12/16 but Mercury had not changed the status to ACTC. This matter was resolved on 11/05/17.

The "Maintenance Breach History Report (RET breaches)" report was examined for the period July 2015 to March 2017. This report contained 680 ICPs where the initial registry update was later than two business days.

I also examined the event detail report for the period March 2016 to February 2017. The table below summarises the registry population timeframes for new connection status changes.

New Connections					
Status	**Total ICPs**	**Update greater than 2 days**	**Update greater than 30 days**	**Average update days**	**Percentage compliant**
ACTC	533	479	12	8.2	10%
ACTV	0	0	0	0	N/A

The list file contained 210 ICPs at the ready status where Mercury was the expected retailer. 32 ICPs were created prior to 01/01/16 and I examined the records for ten of these. Jobs were cancelled for five ICPs and these can be decommissioned, three are on hold and two need to be investigated with the distributor. 65 ICPs were created during 2016 and the remaining 113 were created during 2017. I

recommend Mercury periodically analyses all ICPs at Ready for more than six months to identify ICPs which can be decommissioned, or ICPs which should be ACTC.

Non Conformance	Description	Audited party comment
Regarding: Rule 54.1 Control Rating: Adequate	Registry not populated within two business days for 479 ICPs.	Response: We acknowledge the recommendations. Comments: We are reviewing our processes to improve our monitoring and reduce the amount of time it is taking to update the registry.

7. Maintenance of ICP Information in the Registry (Rules 58 to 61)

Retailers must use "reasonable endeavours" to maintain current and accurate information in the registry (Rule 58) and, if a responsible retailer becomes aware that information is incorrect or requires updating, they must correct or update the information "as soon as practicable" (Rule 61). The Rules do not therefore define a specific time period but for the purpose of this audit, updates that occurred more than 30 business days after the event have been considered an alleged breach, unless information is present to confirm otherwise.

Analysis of status events was undertaken to determine whether the registry was populated within a reasonable timeframe. The table below shows the results of the analysis and confirms that not all updates were within a reasonable timeframe.

Status	Total ICPs	Update greater than 5 days	Update greater than 30 days	Average update days	Percentage compliant
ACTC	4,089	1,253	250	8.9	93.9%
ACTV	2,972	148	35	1.2	98.8%
INACT	128	51	8	17.1	93.8%
INACP	26	20	4	23.3	84.6%

I checked the records for 32 of the late updates over 30 days and found the following issues:

- Three of ten changes to ACTC were due to status updates following a switch in, which took a long time to identify. For the other seven, the issues were mainly related to status changes not flowing through to the registry as expected.
- Seven of ten changes to ACTV were made after delayed contact from the customers. These seven changes were made "as soon as practicable". Three ICPs may have the incorrect status because one has an active customer recorded and two have consumption recorded but no customer.

- Four of eight changes to INACT were due to delayed or incorrect field notification. Two were status corrections identified by "active without meters" reporting. Two were status corrections following a switch in, which took a long time to action.
- Two of four changes to INACP were due to data entry issues. The other two were found as part of discrepancy reporting.

Mercury runs a set of validation reports on a daily basis to identify discrepancies, but as indicated by the results above, some issues were not found and some corrections were not made immediately.

Non Conformance	Description	Audited party comment
Regarding: Rule 61.1 Control Rating: Adequate	Registry updates not occurring as soon as practicable.	Response: New process now implemented. Comments: From receiving the initial audit report we have now put in new monitoring capability which allows us to action reports regularly.

8. Resolving Discrepancies (Rule 62.1)

As mentioned in Section 7, Mercury has a set of validation reports to identify and resolve discrepancies; which was demonstrated during the audit.

I checked several of the validation reports in detail, specifically those where errors could lead to incorrect submission of consumption information to the allocation agent. As mentioned in section 6, I have recommended two improvements to the validation reporting to include ICPs at Ready with metering installed and ICPs at Ready for long periods.

Mercury compares their metering fields against registry metering fields on a daily basis. If a discrepancy is identified, Mercury requires a metering docket or some other form of evidence to confirm the meter pressure before they make a change.

Revisions of consumption information only occur if incorrect invoices are reversed and re-billed with the correct meter pressure. Mercury advised that this occurs if there is a change of more than approx. 2 kPa; however differences of more than approx. 1 kPa will result in errors outside the allowable threshold detailed in NZS 5259. I checked the records of 40 recently identified and corrected discrepancies and found 15 examples where the difference was more than 1 kPa but less than 2 kPa, indicating that revisions were not conducted for these ICPs. This matter is discussed further in the Downstream Reconciliation audit report.

This rule requires the responsible retailer to use "best endeavours" to resolve discrepancies between their data and registry data. I have concluded that the best endeavours threshold has not been met by Mercury because the meter pressure corrections are not applied to the correct periods of inaccuracy.

Non Conformance	Description	Audited party comment
Regarding: Rule 62.1 Control Rating: Adequate	Meter pressure discrepancies not corrected for the entire period of inaccuracy.	Response: Process under review. Comments: We are reviewing our process and investigating ways to ensure that we are carrying out revisions within the allowable threshold while taking in to account the impact on customers.

9. Switching

9.1 Initiation of Consumer Switch / Switching Notice (Rules 65 to 67)

I checked a sample of GNT files to confirm they were sent within two business days of entering into a contract to supply gas to the consumer.

All GNT files for standard switches were sent prior to the event date. Compliance is confirmed.

No GNT files were sent more than 10 business days in advance of the switch date. Compliance is confirmed.

9.2 Response to a Gas Switching Notice (Rules 69 to 75)

Within two business days of receiving a gas switching notice, the responsible retailer must provide to the registry:

1. a gas acceptance notice (GAN); or
2. a gas transfer notice (GTN); or
3. a gas switching withdrawal notice (GNW).

All GAN files were sent on time during the audit period.

The switch breach detail report contained 36 GTA or GTN breaches. Most were due to late GNW files, meaning the registry is expecting a GTN before the GNW is sent, however there was one late GTN file (one day late) because the original file was rejected due to a missing meter location and the replacement file was late.

Non Conformance	Description	Audited party comment
Regarding: Rule 69.1 Control Rating: Effective	One late response to a gas switching notice.	Response: Human error/breach report management. Comments: This rare anomaly occurred due to human error; we have reviewed our process for monitoring the breach report.

9.3 Gas Acceptance Notice (Rule 70)

I checked the content of 15 GAN files to confirm the response codes were correct. The codes checked were AA, AD, MU, OC and PD. The only errors identified were the use of the AD (advanced metering) code. I checked four examples where the AD code was used and in all cases, there was an associated electricity ICP for the GloBug (pre-payment) brand. The GAN file process is automated and it appears SAP is identifying the gas ICPs associated with GloBug ICPs as having advanced meters. There were 57 GAN files with the AD code used. This does not achieve compliance with rule 70.3.

The expected switch date was not later than 10 business days as stipulated in Rule 70.2.2, for any ICPs.

Non Conformance	Description	Audited party comment
Regarding: Rule 70.3 Control Rating: Adequate	Incorrect GAN file content.	Response: Investigating. Comments: This has been identified as a system issue, we are currently investigating options to fix and will rectify as soon as possible.

9.4 Gas Transfer Notice (Rule 72)

The content of a sample of ten GTN files was checked to confirm accuracy and I checked the GTN meter and register data mismatch report (PR-240) for the period March-16 to July-17 to identify errors in the GTN files.

The report contained 416 records but many of these were duplicates. There were 176 unique records. The table below shows a breakdown of the findings in relation to these exceptions.

Mis-match type	Total discrepancies	Comments
Meter identifier	118	A sample of 10 found issues with leading zeros being deleted in SAP and some identifiers being truncated, either in SAP or on the registry
Meter pressure	44	Only 10 of the 40 appear to be genuine discrepancies. 5 of the 10 had zero for meter pressure and the other 5 were set-up errors.
Meter digits	11	Only 2 appear to be genuine errors
Meter multiplier	3	None of these appear to be errors

The errors above indicate non-compliance with rules 72.1.6, 72.1.7, 72.1.8(a) and 72.1.8(b).

I checked the records for ten of 568 ICPs where the annual consumption was zero. In five cases, zero was incorrect and in the other five cases zero was correct. The incorrect records were all manually entered into the registry following the failure of the automated file.

I also checked six records where the consumption appeared to be unusually high and in all cases there had been a meter rollover during the period the ICP was held by Mercury. The high consumption figures were incorrect.

This matter is not recorded as a breach because the rules do not stipulate an accuracy threshold for this field. A recommendation is made in section 11 that improvements are made in relation to this field.

9.5 Accuracy of Switch Readings (Rule 74)

The checks discussed in Section 9.4 included switch readings, which were all accurate. Compliance is confirmed.

9.6 Gas Switching Withdrawal (Rules 74A, 75, 76, 78)

An analysis was undertaken of GNWs (switching withdrawal notices) to identify the number within each reason category. This was done as both the recipient of the GNW and as the initiator of the GNW. The results are shown in the tables below:

GNW files sent and received

NW Files	CR	DF	IN	MI	UA	WP	WS	Total	% of GNTs
NW Sent (old retailer)	1,626	24	0	34	6	57	164	1,905	22.29%
NW Sent (new retailer)	155	9	0	7	4	72	1	244	2.30%
NW Received (old retailer)	1,755	11	0	14	0	45	161	1,986	18.68%
NW Received (new retailer)	406	47	0	4	5	71	2	535	6.26%

The quantity of withdrawals appears to be in line with industry norms, based on other recent audits.

I checked examples of all GNW codes where Mercury was the new retailer and where Mercury was the old retailer (22 files in total). In all cases, the correct codes were used and Mercury had sufficient information to support the withdrawal.

I checked a sample of ten examples where GNW files had been sent by other retailers and had been rejected by Mercury. In all cases, Mercury had sufficient information to support the rejection. 3.0% of GNW files received were rejected.

141 of 2,157 GNW files sent by Mercury (6.54%) were rejected. I checked ten examples and found that Mercury sent all ten files in error. These errors have led to non-compliance with rule 75.1.

Non Conformance	Description	Audited party comment
Regarding: Rule 75.1 Control Rating: Adequate	Switch withdrawal notices sent in error.	Response: Human error/breach report management. Comments: These occurred due to human error; we have reviewed our process for monitoring the breach report.

There were four late GAW files sent during the audit period.

Non Conformance	Description	Audited party comment
Regarding: Rule 78.1 Control Rating: Effective	Four late GAW files.	Response: Human error/breach report management. Comments: These occurred due to human error; we have reviewed our process for monitoring the breach report.

9.7 Switch Reading Negotiation (Rule 79, 81)

There were 327 instances of Mercury sending a GNC. A sample of their GNCs were reviewed and all were found to be substantiated.

There were 330 GNCs sent by other retailers, indicating inaccurate switch reads by Mercury. Mercury accepted 249 GNCs (75%)

There were 56 of 382 GAC files (15%) sent by Mercury where they rejected the other retailer's switch read. There were 81 of 330 ICPs (25%) where the other retailer rejected Mercury's proposed read.

I checked a sample of GNC files sent by Mercury and their read was confirmed as correct in all cases. The same is true for a sample of GNC files received by Mercury, in all cases, Mercury agrees with the proposed reading change.

Rejected GAC files were examined and I found that rejections only occurred when there was disagreement with the reading provided and acceptance was then confirmed once a reading had been negotiated. The process is working as expected.

One GAC file was sent late during the audit period, due to a system issue causing the GNC file not to appear in SAP.

Non Conformance	Description	Audited party comment
Regarding: Rule 81.1 Control Rating: Effective	One late GAC file.	Response: Human error/breach report management. Comments: This instance occurred as a result of human error; we have reviewed our process for monitoring the breach report. Our controls and processes are considered to be effective, we will review our training.

10. Bypass of Distributor (Rule 82)

Mercury has not been involved in any new bypass events during the audit period. Compliance is confirmed.

11. Recommendations

- I recommend Mercury periodically checks ICPs at the Ready status with metering installed to ensure they are changed to Active within the required timeframes.
- The list file contained 210 ICPs at the ready status where Mercury was the expected retailer. 32 ICPs were created prior to 01/01/16. 65 ICPs were created during 2016 and the remaining 113 were created during 2017. I recommend Mercury periodically analyses all ICPs at Ready for more than six months to identify ICPs which can be decommissioned or ICPs which should be ACTC.
- The annualised consumption figure is recorded as zero in some examples where GTN records are manually created in the registry. The annualised consumption figure is incorrectly higher than the actual consumption in cases where there has been a meter rollover during the period the ICP was held by Mercury. I recommend both of these matters are addressed.

Appendix 1 – Control Rating Definitions

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