

VERITEK

# Gas Registry and Switching Performance Audit Final Report

For

**Nova Energy Limited**



Prepared by

Steve Woods: Veritek Limited

Date of Audit: 21/02/17 & 23/02/17

Date Audit Report Complete: 20/05/17

## 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 Nova Energy Limited (Nova) in terms of compliance with these rules.

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

The summary of report findings in the table below shows that Nova's control environment is "effective" for eleven of the areas evaluated, "adequate" for two areas and "not adequate" for one area.

Eleven of the 14 areas evaluated were found to be compliant. Three breach allegations are made in relation to the remaining areas. They are summarised as follows:

- The registry was not populated within two business days for 243 ICPs
- Registry updates are not all occurring as soon as practicable
- I have concluded that the best endeavours threshold has not been met in relation to the timeliness and event date for meter pressure corrections.

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

- I recommend Nova evaluates all meter pressure changes conducted in the previous 12 months to determine whether the meter pressure change has the correct date and whether revisions need to be conducted.

## 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 Nova acting unreasonably were found.
Obligation to use registry software competently	4	Effective	Compliant	No examples of Nova using registry software incompetently were found.
ICP identifier on invoice	5	Effective	Compliant	The ICP identifier is shown on Nova's invoices.
Uplift of READY ICP	6	Adequate	Not compliant	The registry was not updated within two business days for approximately half of new connections. The average days to update the registry is five, which is considered relatively short.
Maintenance of ICP information in registry	7	Adequate	Not compliant	Not all registry updates were made within a reasonable timeframe.
Resolving discrepancies	8	Not 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 in relation to the timeliness and event date for meter pressure corrections. I recommend Nova evaluates all meter pressure changes conducted in the previous 12 months to determine whether the meter pressure change has the correct date and whether revisions need to be conducted.

<b>Issue</b>	<b>Section</b>	<b>Control Rating</b> <b>(Refer to Appendix 1</b> <b>for definitions)</b>	<b>Compliance</b> <b>Rating</b>	<b>Comments</b>
Initiation of consumer switch/switching notice	9.1	Effective	Compliant	No issues were found with this process.
Response to a gas switching notice	9.2	Effective	Compliant	No issues were found with this process.
Gas acceptance notice	9.3	Effective	Compliant	No issues were found with this process.
Gas transfer notice	9.4	Effective	Compliant	No issues were found with this process.
Accuracy of switch readings	9.5	Effective	Compliant	Switch readings are accurate.
Gas switching withdrawal	9.6	Effective	Compliant	No issues were found with this process.
Switch reading negotiation	9.7	Effective	Compliant	No issues were found with this process.

## Persons Involved in This Audit

Auditors:

Steve Woods  
**Veritek Limited**

Tara Gannon  
**Veritek Limited**

Nova personnel assisting in this audit were:

Name	Title
Natasha Dauphin	Retail Operations Manager
Abdul Osman	Gas TOU Billing Manager
Christina Ah Mann	Metering and New Connections Team Leader
Andrea Moosa	Billing Team Leader
Nigel Gallagher	Retail Operations Analyst
Rhys Baker	Switching Team Leader

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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 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 on February 21<sup>st</sup> in Whakatane, and February 23<sup>rd</sup> in Auckland.

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 Nova 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 Nova 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.<sup>1</sup>

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.

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<sup>1</sup> 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 Nova under the Gas (Switching Arrangements) Rules 2008.

### 1.3.2 Breach Allegations

Nova does not have any breaches recorded by the Market Administrator for the audit period.

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 243 ICPs.	54.1	6
Registry updates not occurring as soon as practicable.	61.1	7
The best endeavours threshold has not been met in relation to the timeliness and event date for meter pressure corrections.	62.1	8

## 1.4 Provision of Information to the Auditor (Rule 91)

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

Information was provided by Nova 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	Included in report
Nova Energy	Yes	Yes	Yes
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. Nova's comments are included in the tables in Sections 6, 7 and 8. No other changes were made to the report after consideration 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.

Nova has supplied accurate registration information. Compliance is confirmed.

### **3. Obligation to Act Reasonably (Rule 34)**

No examples of Nova acting unreasonably were found.

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

No examples of Nova using registry software incompetently were found.

### **5. ICP Identifier on Invoice (Rule 36)**

The ICP identifier is shown on Nova'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 manually loaded into Orion.

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. For reconnections, some customers do not sign up with a retailer until a "vacant disconnection" letter is sent.

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 all six ICPs where the update to the registry was later than 30 business days and I found that submission of consumption information to the allocation agent occurred at the beginning of the following month for four of six. For the remaining two ICPs, submission information was not provided for the initial allocation, but was provided by the time of the interim allocation. Late field notification caused four late updates and processing issues caused the remaining two issues.

The "Maintenance Breach History Report (RET breaches)" report was examined for the period August 2015 to December 2016. This report contained 449 ICPs where the initial registry update was later than two business days.

I also examined the event detail report for the period January to December 2016. 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	512	243	6	5.2	53%
ACTV	0	0	0	0	N/A

The list file contained 78 ICPs at the ready status where Nova was the expected retailer. By the time of the on-site audit, the number of ICPs had been reduced to two, which are genuine pending new connections. The other 76 ICPs were mostly cancelled new connections. There are six ICPs at the ready status for the BOPE code and 303 for the AGCL code. These ICPs were created many years ago and did not proceed to the connected stage. The BOPE and AGCL codes are no longer used and Nova intends to have these ICPs decommissioned.

Non Conformance	Description	Audited party comment
<p>Regarding: Rule 54.1</p> <p>Control Rating: Adequate</p>	<p>Registry not populated within two business days for 243 ICPs.</p>	<p>Response: Acknowledged</p> <p>Comments:</p> <ul style="list-style-type: none"> <li>Nova agrees with the Auditors comments "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."</li> <li>Not all Distributors have aligned processes with regard to the READY status of an ICP which contributes to the industry misalignment of process Vs Rule.</li> <li>This contributes to the inability to be fully compliant with this Rule.</li> <li>Nova suggests that the GIC review the Rule via Industry consultation.</li> </ul>

## 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.

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	1,691	625	98	12.4	94.2%
ACTV	452	25	10	6.6	97.8%
INACT	394	65	30	27.1	92.4%
INACP	49	10	3	9.9	93.9%

I checked the records for 23 of the late updates over 30 days and found the following issues:

- Five of ten changes to ACTC were due to status updates following a switch in. Four were due to event date corrections following the identification of errors during the data integrity processes.
- Three of five changes to ACTV were due to status corrections. One was updated in Orion but not on the registry and was identified during the data integrity processes. One was a date error with the event date having the incorrect year.
- One of five changes to INACT was due to claiming an old “ready” ICP. Two were status corrections identified during the data integrity processes. One was late notification from the field and one was a date error correction.
- Two of three changes to INACP were due to late notification from the field. One was due to Orion being updated but not the registry.

Orion and the registry are both updated manually, which can result in errors. Nova runs a comprehensive set of data integrity checks on a daily basis to identify discrepancies, but as indicated by the results above, some corrections were not made immediately.

Non Conformance	Description	Audited party comment
<p>Regarding: Rule 61.1</p> <p>Control Rating: Adequate</p>	<p>Registry updates not occurring as soon as practicable.</p>	<p>Response: Acknowledged</p> <p>Comments:</p> <ul style="list-style-type: none"> <li>We have enhanced data validation reporting to identify if there are items that will not meet the "as soon as practicable" guideline.</li> </ul>

## 8. Resolving Discrepancies (Rule 62.1)

As mentioned in Section 7, Nova has a set of data integrity reports to identify and resolve discrepancies; which was demonstrated during the audit. At the time of the audit, the validation compared Orion data to registry data for all relevant fields, apart from network pressure, which is used as part of the Joule Thomson calculation. Nova has since prepared a network pressure validation report. There is also a check to identify ICPs where the network pressure is lower than the meter pressure.

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. The reports checked in detail included the following:

- ICP status discrepancies, including status change dates
- Altitude – this is a monthly check between Orion and the registry, any adjustments flow through to the relevant submission and revision files
- Meter pressure discrepancies
- Gas gate discrepancies.

I checked four ICPs that were ACTC but where meters were recorded as "removed" in the registry. These were all merely timing issues between the meter removal data and the status change date. There was no impact on consumption information.

Nova compares their metering fields against registry metering fields on a daily basis. There were some time delays between identification of meter pressure discrepancies and the updating of Orion for five ICPs checked during the audit. The discrepancies were identified in July 2016 when the registry was updated by the meter owner, but the corrections were not made until November 2016. One ICP had a change to the correct pressure for July 2016, then a change back to the incorrect pressure up until November 2016 when it was corrected again.

Revisions of consumption information will occur for these ICPs because the new meter pressure will be automatically applied to all revisions. If a change occurs on a specific date, a different process is used to ensure the different meter pressures are applied to the correct time periods.

A further issue is that the meter pressure changes populated on the registry by the meter owner (NGCM) all had the same event date as the data entry date, but the meter serial numbers were the same, which suggests the errors may have been in existence since the meters were first installed. I recommend Nova evaluates all meter pressure changes conducted in the previous 12 months to determine whether the meter pressure change has the correct date and whether revisions need to be conducted.

Recommendation	Audited party comment
<p>I recommend Nova evaluates all meter pressure changes conducted in the previous 12 months to determine whether the meter pressure change has the correct date and whether revisions need to be conducted.</p>	<p>Response: Recommendation Accepted.</p> <p>Comments:</p> <ul style="list-style-type: none"> <li>• Nova Energy is reliant on the accuracy of the metering data supplied to us by the meter owner and via GTN files to ensure metering specific invoicing factors are correct.</li> <li>• Without having absolute validation from the metering provider that the information is correct on the registry the meter pressure used by Nova Energy may be incorrect.</li> <li>• Nova Energy will identify meter pressure changes over the past 12 months.</li> </ul>

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 been met by Nova for all areas apart from meter pressure.

Non Conformance	Description	Audited party comment
<p>Regarding: Rule 62.1</p> <p>Control Rating: Adequate</p>	<p>The best endeavours threshold has not been met in relation to the timeliness and event date for meter pressure corrections.</p>	<p>Response: Acknowledged.</p> <p>Comments:</p> <ul style="list-style-type: none"> <li>• We are confident that our data integrity validation reporting is robust and improvement of the “best endeavours” threshold guideline will be achieved</li> </ul>

## 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).

The switch breach report confirmed there were no late files during the audit period. Compliance is confirmed.

### 9.3 Gas Acceptance Notice (Rule 70)

A sample of 10 GAN files was checked to confirm the accuracy of the content and that the expected switch date was not later than 10 business days as stipulated in Rule 70.2.2.

Compliance is confirmed.

### 9.4 Gas Transfer Notice (Rule 72)

The content of a sample of 15 GTN files was checked to confirm accuracy. I did not identify any errors in any of the files.

I checked the records for ten ICPs where the annual consumption was zero. In all cases, zero was correct because the ICPs were vacant, had a very short switch in period, or genuinely had zero consumption.

The switch breach detail report confirmed that all files were sent on time. Compliance is confirmed.

### 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)	539	10	0	16	6	67	99	737	12.84%
NW Sent (new retailer)	56	14	0	2	4	24	1	101	2.58%
NW Received (old retailer)	388	7	0	11	0	22	120	548	14.02%
NW Received (new retailer)	264	42	0	6	4	54	3	373	6.49%

It is not clear whether the numbers above are typical or not, because this is the first switching audit for Nova.

I checked examples of all GNW codes where Nova was the new retailer and where Nova was the old retailer. In all cases, the correct codes were used and Nova had sufficient information to support the withdrawal.

I checked a sample of 36 examples where GNW files had been sent by other retailers and had been rejected by Nova. In all cases, Nova had sufficient information to support the rejection. 4.5% of GNW files received were rejected.

40 of 849 GNW files sent by Nova (4.7%) were rejected. I checked all 40 and found that Nova sent three files in error, and there were valid reasons at the time of sending the remaining 37 files. The main two reasons for rejection were as follows:

- The other retailer had contact with the customer after receipt of the GNW, leading to the rejection of GNW files
- GNW originally rejected then accepted following communication.

Compliance is confirmed.

## 9.7 Switch Reading Negotiation (Rule 79, 81)

There were 188 instances of Nova sending a GNC. A sample of their GNCs were reviewed and all were found to be substantiated.

There were 264 GNCs sent by other retailers, indicating inaccurate switch reads by Nova.

There were 26 of 189 GAC files sent by Nova where they rejected the other retailer's switch read. There were 50 of 264 ICPs where the other retailer rejected Nova's proposed read.

I checked a sample of GNC files sent by Nova and their read was confirmed as correct in all cases. The same is true for a sample of GNC files received by Nova, in all cases, Nova 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. Compliance is confirmed.

## 10. Bypass of Distributor (Rule 82)

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

## 11. Recommendations

I recommend Nova evaluates all meter pressure changes conducted in the previous 12 months to determine whether the meter pressure change has the correct date and whether revisions need to be conducted.

## 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 – Nova Energy Comments

Nova would like to thank Veritek Ltd for conducting the 2017 audit