



PERFORMANCE AUDIT REPORT UNDER THE SWITCHING ARRANGEMENTS AND DOWNSTREAM RECONCILIATION RULES

GasNet Limited as Distributor and Meter
Owner

Audit date: 28 to 29 February 2024

Report date: 31 March 2024

Under the Gas (Switching Arrangements) Rules 2008 and the Gas (Downstream Reconciliation) Rules 2008 the Gas Industry Company has commissioned Langford Consulting to undertake a performance audit of GasNet Limited in its role of distributor and meter owner. The purpose of the audit is to assess compliance with the rules and the systems and processes put in place to enable compliance.

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Executive Summary

Under the Gas (Switching Arrangements) Rules 2008 and the Gas (Downstream Reconciliation) Rules 2008 the Gas Industry Company (GIC) commissioned Langford Consulting to undertake a performance audit of GasNet Ltd (GasNet).

The purpose of the audit is to:

- assess compliance with the rules
- assess the systems and processes put in place to enable compliance with the rules

The audit was conducted within the terms of reference supplied by the GIC and within the guideline note *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>).

The engagement commenced on 18 October 2023 and involved a site visit to GasNet's Whanganui office.

The summary of report findings shows that the GasNet control environment, for the 15 areas evaluated, was found to be: "effective" for 10 areas; "acceptable" for 2 areas; "needs improvement" for 1 area; "not applicable" for 2 areas.

4 breach allegations are made in relation to GasNet regarding the non-compliant areas and are summarised in the following table. The following recommendations were also made:

Recommendations

Alter the new ICP process documentation to make it clear that it is GasNet's responsibility to decide the load shedding category. Include information about the definition of each category in the process document to assist staff with this decision.

Procedure documents should be revised, and staff training occur, to ensure accuracy and consistency of event dates.

Add a check of network tariff codes against load shedding category to the routine monthly quality checks and update procedure documents and staff training to ensure it is understood GasNet are responsible for the accuracy of the load shedding category, not retailers.

Pricing requests under rule 50 should be identified on receipt, logged and the emails filed together, to ensure a prompt response is prioritised and to enable compliance with the rules to be demonstrated.

When Midas is not available (routinely during the October pricing upload) the registry should be updated manually by logging on to the front end of the registry, rather than delaying the update and relying on the overnight update from Midas once the system is available again.

Summary of breach allegations

All breach allegations are made under the Gas (Switching Arrangements) Rules 2008 unless otherwise stated.

Section	Summary of issue	Rules potentially breached
4.3	<p>Incorrect event dates added to the registry for 11 DECRs processed in 2023.</p> <p>The date entered should have been the date the site was originally decommissioned, not the date that DECR was entered into the registry.</p>	r58.1
4.3	<p>Out of a total of 150 pricing events, 20 were found to have incorrect event dates in the registry due to the defaults used by the automated registry update system, which were not appropriate to the type of event and had not been overwritten by the routine manual review.</p>	r58.1
4.3	<p>Data analysis of the load shedding category against other registry fields identified 18 ICPs with incorrect categories.</p>	r58.1
5.4	<p>2 new ICPs, out of a sample of 24, did not have their meter owner registry data entered into the registry within 2 business days of being informed that the equipment had been installed.</p>	r56.1

Summary of report findings

Issue	Section	Control Rating	Compliance Rating	Comments
GENERAL				
Participant registration information	3.1	Effective	Compliant	The participant registry information was confirmed as current
Obligation to act reasonably	3.2	Effective	Compliant	No examples of GasNet acting unreasonably were found
Obligation to use registry software competently	3.3	Effective	Compliant	No examples of GasNet using software incompetently were found
AS DISTRIBUTOR				
Assignment of ICPs	4.1	Effective	Compliant	Every new ICP has a site visit from technical staff and is reviewed by the in-house engineering team
Creation of new ICPs	4.2	Effective	Compliant	ICPs were added to the registry within the required timeframes and no inaccuracies were identified
Maintenance of ICPs in the registry	4.3	Acceptable	Not compliant	There are recommendations to improve accuracy of event dates and load shedding categories
Notices of gas gate creation/ decommissioning	4.4	Not applicable	Not applicable	There had been no gas gate changes since the last audit

Publishing of network price category codes	4.5	Effective	Compliant	These were reviewed and found to be current and publicly available
Disclosure of ICP information	4.6	Needs improvement	Compliant	Although no non-compliance was found there are no controls in place to ensure pricing requests are identified and prioritised on receipt, or to enable compliance to be demonstrated
Loss factor codes	4.7	Not applicable	Not applicable	GasNet do not use loss factor codes
AS METER OWNER				
Compliance with NZS5259	5.1	Effective	Compliant	GasNet has strong controls for selecting and maintaining equipment and retain documentation to support their activity
Provision of metering price codes	5.2	Effective	Compliant	Metering prices were provided and are sent to participants.
Disclosure of ICP information	5.3	Effective	Compliant	All metering prices are available to all retailers
Registry information for new ICPs	5.4	Acceptable	Not Compliant	2 out of a sample of 24 new ICPs had meter information added to the registry late
Maintenance of ICP information	5.5	Effective	Compliant	Registry data was well aligned with GasNet system data and updates were being made in a timely fashion

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1. Introduction

Under the Gas (Switching Arrangements) Rules 2008 (the rules) and the Gas (Downstream Reconciliation) Rules 2008 the Gas Industry Company (GIC) commissioned Langford Consulting to undertake a performance audit of GasNet Ltd (GasNet) as a distributor and meter owner. The audit was commissioned under rule 88 and was conducted within terms of reference prepared by the GIC.

The purpose of the audit is to:

- assess compliance with the rules
- assess the systems and processes put in place to enable compliance 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>).

All references to the rules are made under the Gas (Switching Arrangements) Rules 2008 unless otherwise stated.

GasNet is the distributor for 10,000 active ICPs and meter owner for 10,000 ICPs. GasNet meters are all on the GasNet distribution network except for about 200 on the Powerco network.

The engagement commenced on 18 October 2023 and involved a site visit to GasNet's Whanganui office on 28/29 February 2024.

2. General Compliance

2.1 Switch Breach Report

GasNet has received no breach allegations since the last audit

2.2 Summary of previous audit

The last audit was undertaken by Veritek Ltd in September 2020. A summary of the distributor breach allegations raised was as follows:

- Four new ICPs had some information populated late.
- 27 ICPs were confirmed to have incorrect load shedding categories recorded, and a further three ICPs are under investigation. Five were corrected during the audit, and GasNet is working with the affected retailers to confirm the correct load shedding categories for the remaining exceptions.
- 24 ICPs with more than one meter at the address had duplicate addresses recorded. 22 were made unique during the audit, and the other two ICPs are under investigation with the retailer.
- Five updates to decommissioned status were not made as soon as practicable.
- Four pricing updates were not made as soon as practicable. The changes only affected the maximum hourly quantity field and there was no impact.

GasNet had dealt with the problem that led to the 24 duplicate addresses by adding an additional address field "PremiseName" into Midas. This enables an additional differentiating description to be added to the address such as a floor number, letter or physical description such as 'front' or 'back'. They have also added a step to their new ICP process and a data quality check to their monthly data maintenance procedure to ensure duplicate addresses do not reappear in their database.

The following recommendations were made:

- check load shedding categories for reasonableness at least quarterly, and follow up any exceptions with the retailers, and
- check ICPs at INACT GPM status as part of the fortnightly validation to determine whether an application for decommissioning has been received, and a decommission is underway.

The checking of load shedding categories for reasonableness had been added to the monthly checks.

Checking if ICPs at INACT and GPM had also been added to the monthly check process. There were no INACT ICPs with GPM at the time of this audit.

A summary of the breach allegations raised as meter owner was as follows:

- check consistency between connection statuses and meter identifiers at least monthly and follow up any exceptions, and
- GasNet should ask the retailers for the 36 ICPs with UNKN (unknown) meter locations to provide any meter location information that they hold, so that the meter locations can be updated.

The following recommendations were made:

- check consistency between connection statuses and meter identifiers at least monthly and follow up any exceptions, and
- GasNet should ask the retailers for the 36 ICPs with UNKN (unknown) meter locations to provide any meter location information that they hold, so that the meter locations can be updated.

A check for ICPs with no meter, but a status of GAS has been added to the monthly data quality checks. There were no examples at the time of the audit.

GasNet had followed up to establish the location of UNKN meters. At the time of this audit there were no longer any UNKNs for active sites.

2.3 Provision of information to the auditor

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

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

3. General obligations

3.1 Participant registration information

The participant register information for GasNet was last updated in July 2017, but was tested and demonstrated as still being current.

3.2 Obligation to act reasonably

No examples of GasNet acting unreasonably were found.

3.3 Obligation to use registry software competently

No examples of GasNet using registry software incompetently were found.

4. Obligations as distributor

The audit took a multi layered approach reviewing the GasNet processes and controls; looking for outliers in the data to investigate; reviewing a sample of ICPs for the accuracy of the registry fields.

The auditor was shown two process documents, one for new ICPs and one for ICP maintenance/quality checks. GasNet have a bespoke system called Midas for managing ICPs, which is where information is managed that relates to registry fields, both as distributor and

meter owner. They have an overnight process called FileZilla which automatically updates the registry. The team also have access to the GIS system and the work order system.

4.1 Assignment of ICPs (rules 5.2, 43.1 and 43.2)

GasNet supplied the auditor with a copy of their new ICP connections process document. This included:

- details of required competencies
- processes
- quality data checks and
- information about fields that auto populate

Rule 43.1 and 43.2

These rules require that a distributor assign an ICP identifier for each consumer installation connected to its system. Each consumer installation must represent a single consumer installation that:

- may be isolated without affecting another consumer installation
- may have a single loss factor and network price category and
- has its gas volume measured directly by a single set of compliant metering equipment or indirectly by a method approved by the industry body

Each request for a new gas connection results in a site visit. A design is created for the new site which is reviewed by the in-house engineering team before proceeding. An example of a new site where the ICP was at the rear of another property down a ROW was sighted on GIS. It could be seen that the point of isolation was immediately at the entrance of the property itself – it wouldn't be affected by a site upstream being isolated and would also not affect another ICP downstream.

All of GasNet's newly created ICPs were given a single network price category. GasNet do not use loss factors.

See the meter owner section of this report to see how compliant gas metering is installed – new GasNet sites have all been assigned new GasNet meters.

GasNet's controls in the new connections process were found to be sufficient to comply with the requirements of rule 43.1 and 43.2.

4.2 Creation of new ICPs (rule 51.2 and 51.3)

Since the last audit GASNET had created 245 new ICPs. None of these were TOU, one was in allocation group 4, the remainder in group 6.

If the distributor receives a request from a retailer, they must assign an ICP identifier to the new consumer installation within 3 business days of the request or notify the retailer why the ICP cannot be assigned.

Applications for new ICPs come in from householders, retailers or developers. They are received via email on a request form which requires essential information relating to address information and expected appliances. This results in a site visit from technical staff, which in return results in a plan for the new ICP and a quote being sent.

Once the quote is accepted this is considered a request for an ICP. GasNet use an in-house bespoke system called Midas to create a new ICP. The number is automatically generated by the system and the numbers created all conformed to the registry requirements with the correct distributor code and checksum algorithm.

Midas creates a file, called FileZilla, for upload of any changes and sends it to the registry every night.

The acceptance date was pulled from Midas for a sample of 25 new ICPs created since the last audit. The acceptance date was compared to the registry creation date. Only 1 ICP failed the 3 business day test. However, on further examination once the relevant correspondence was found, it was established that at the original date of 'acceptance' the paperwork was not complete, the customer had not provided an expected retailer. GasNet had requested this clarification and created the ICP as soon as the acceptance paperwork was fully completed. It was appropriate therefore to consider this later date as the date of acceptance.

No breaches of the 3 business day rule were therefore found.

All instances of GasNet ICPs contained the correct 2 letter code GN.

Because GasNet do not create the ICP until the quote has been accepted, it is their process to input all the registry parameters at the time of creating the ICP. This is possible because the entire site plan has already been developed. There were therefore no breaches of rule 51.3 either (registry populated with ICP id; creation date; distributor and physical address with 2 business days of connection) or rule 53.1 (completion of the remaining distributor parameters) because the fields were populated on acceptance of the quote, prior to connection, as was found in the last audit.

This approach does however create the risk that when connection does subsequently occur, that the actual details are different from those originally entered. The controls for this are that an installation sheet is received back from site and the details verified against the Midas entries – any change to which would update the registry. Also, the GIS expert is aware of this risk and shares information with the Administration Supervisor. An example of this occurred while the auditor was on site – a new ICP had an altitude of 0.1 different to that originally entered after the site visit.

The physical address supplied by the retailer or customer is verified against GIS and is also checked as unique within the database. The last audit had found an issue with ICPs having duplicate addresses. Since the last audit an additional field had been added to Midas to ensure all ICPs can be given unique addresses e.g. by using A/B, front/back etc to differentiate ICPs who otherwise would have the same address.

The site plan is checked for the location of the meter.

Gas Gates

GasNet's Midas system automatically assigns gas gates when the ICP address is first entered, this is then automatically loaded via FileZilla to the registry overnight. GasNet only has assets at

5 gas gates. These are well defined geographically and there aren't grey areas where it isn't clear which system an ICP is being fed from.

A review was undertaken of all ICPs created since 2018 to find outliers with addresses that might not be associated with the registry gas gate. None were found.

A sample of 24 new ICPs were reviewed to see if the correct gas gate had been allocated.

No issues were found.

Load shedding

Load shedding category for new ICPs is determined using the information from the initial application and the site visit. The main decision for GasNet is to determine whether the site is domestic or commercial to decide whether the code should be DOM or 6. There had only been 1 new ICP since the last audit that was category 4 and this connection had stood out easily from the normal new connections.

A sample of 24 new ICPs were reviewed for the correct load shedding category. No issues were found.

It was however noticed that the new ICP process is to ask the retailer for an instruction about which category to use. The auditor highlighted that it was the distributor's responsibility to determine the load shedding category. Collaboration with the retailer is useful, but ultimately it is a distributor responsibility.

Recommendation

Alter the new ICP process documentation to make it clear that it is GasNet's responsibility to decide the load shedding category. Include information about the definition of each category in the process document to assist staff with this decision.

Altitude

Altitude for new ICPs is established from the GIS system.

All new ICPs created since the last audit were reviewed for outlier altitudes. Also, a sample of 24 new ICPs were reviewed for the correct altitude. No issues were found.

Network pressure

An analysis of network pressure for all active GasNet ICPs was done. This showed only 6 entries for the network pressure field. The distribution of ICPs by each entry was as follows:

Network pressure	Midas Gate Pressure	No of ICPs	Gas Gate
2	LP1	7,122	WAG21501
150	MP4	5	FLH21901
210	MP1 or MP3	2,680	MTN23801 and WAG21501

300	MP5 or MP16	150	LAB20201 and WTT20301
1050	IP1	19	WAG21501
1500	IP2	3	MTN23801

Each network pressure group was reviewed by gas gate to look for outliers. This is further detailed in the maintenance of ICPs section.

A sample of 24 new ICPs were reviewed for the correct network pressure by sighting the ICP in the GIS system. No issues were found.

Network Pricing Category

Network pricing is automatically populated by Midas when the meter price is selected.

A sample of 24 new ICPs were reviewed for the correct network pricing category. No issues were found.

4.3 Maintenance of ICPs in the registry

An extract of all distributor registry fields from GasNet's system was compared with the GasNet entries in the registry. For the active ICPs no differences were found between the two systems for gas gate, altitude, load shedding or network price. Loss factor was not applicable as it wasn't used by GasNet.

The alignment between the systems was therefore found to be well controlled.

The ICP maintenance procedures include monthly data quality checks, for example a comparison of the alignment between Midas and the registry; a review of gas gates and the ICP addresses for any that don't make sense; a review of gas gates and network pressures and a review of altitudes for any that may have been input incorrectly.

The monthly quality checks included checks recommended by the last audit (the reasonableness of load shedding categories and ICPs at INACT GPM for decommissioning applications).

Network price category is automatically updated if the GMS tariff is changed in Midas.

Upgrades to the network are rare, but if they do occur a job sheet is completed showing the changes. If the gate supply pressure field is updated in Midas it is automatically updated in the registry via FileZilla.

Event Details

The EDA records were reviewed to identify ICPs made DECR since the last audit. Between 1/10/20 and 31/10/23 GasNet had decommissioned 145 ICPs. For context GASNET has approximately 13,000 ICPs (excluding DECRs) of which 2,300 are INACP or INACT.

The decommissioning process commences with a notice from the retailer via e-mail. GasNet then develop a quote, which the retailer accepts via email. Once the job is completed on site a

job sheet is sent to administration who enter the information in Midas. This is then sent to the registry overnight via FileZilla. GasNet then need to wait for the retailer to update the status which then enables GasNet to finish the DECR process.

Job sheets that have been entered into Midas but the retailer has not yet updated the registry are kept on hand and monitored. Retailers are chased if action isn't completed.

The DECR events were further reviewed, the average time between the event date and the DECR date entered into the system was 60 days, although it was noted the gap was much less in 2023 with most DECRs being entered on the event date. On further examination on site it was identified that DECRs had been managed by a new staff member who was entering the event date as the date DECR was entered into the registry, rather than the date the site had been physically decommissioned. GasNet agreed to follow up by adding information about how event dates should be added to the registry in their procedure document and to provide associated staff training.

Incorrect DECR event dates		
Non-compliance	Description	
Report section: 4.3 Rule: 58.1 From: 13 July 2023 To: 19 October 2023	Audit history: Yes Controls: Needs improvement Impact: Insignificant	Incorrect event dates added to the registry for 11 DECRs processed in 2023. The date entered should have been the date the site was originally decommissioned, not the date that DECR was entered into the registry.
Remedial action rating	Remedial timeframe	Remedial comment
In Progress	12/04/2024	Updating Instructions and discussing with Admin staff
Audited party comment		
The circumstances of the matters outlined in the breach notice.	GasNet agrees	
Whether or not the participant admits or disputes that it is in breach.	GasNet admits breach	
Estimate of the impact of the breaches (where admitted).	GasNet will update Registry with correct date	
What steps or processes were in place to prevent the breaches?	Communication error. Gasnet instructions were not clear enough for new staff member.	
What steps have been taken to prevent recurrence?	Update instructions to make process clearer and verbally discuss with new staff member.	

See Appendix 4 for alleged breach detail.

Address event data since the last audit were reviewed for timeliness. There were 87 events most of which were entered on the same date as the event date. A sample of those that had taken significantly longer were reviewed on site and were found to have sensible reasons for the length of time e.g. an improvement to address detail with an event date of the original creation of the ICP. No address events were found to have taken an unreasonable amount of time to update.

Network event data was reviewed for events occurring since the last audit. There were 185 network events with most being entered into the registry on the event date. Only 2 events took more than 30 business days and these were found to be quality control events with the event date being backdated (one was a trivial change to altitude which would not result in any significant impact on energy calculations; the second was a change to load shedding category resulting from a quality check). No events were found to have taken an unreasonable amount of time.

Pricing events since the last audit were also reviewed. There had been 150 events most of which were entered into the system within 30 business days. A sample of those which had taken longer were reviewed. It was identified that the Midas/FileZilla system was backdating pricing event dates by default back to the last event that had occurred in the system, which was often the last 1 October price change, which was not appropriate to the nature of the event (e.g. a change to the MHQ). All FileZilla entries are reviewed manually before they are sent to the registry. It was agreed these system defaults to event date should have been overwritten as a part of this manual checking.

Incorrect pricing event dates		
Non-compliance	Description	
Report section: 4.3 Rule: 58.1 From: 16 November 2020 To: 13 September 2023	Audit history: Yes Controls: Needs improvement Impact: Insignificant	Out of a total of 150 pricing events, 20 were found to have incorrect event dates in the registry due to the defaults used by the automated registry update system which were not appropriate to the type of event and had not been overwritten by the routine manual review.
Remedial action rating	Remedial timeframe	Remedial comment
In Progress	As programmer is available	External party to remedy
Audited party comment		
The circumstances of the matters outlined in the breach notice.	GasNet agrees	
Whether or not the participant admits or disputes that it is in breach.	GasNet admit breach	
Estimate of the impact of the breaches (where admitted).	Minor software issue	

What steps or processes were in place to prevent the breaches?	GasNet were not aware of issue
What steps have been taken to prevent recurrence?	Programmer to be asked to update software. Until this has been complete GasNet staff will ensure FileZilla data is corrected manually prior to loading to Gas Registry.

See Appendix 4 for alleged breach detail.

Recommendation

Procedure documents should be revised, and staff training occur, to ensure accuracy and consistency of event dates.

Load Shedding

For new ICPs load shedding categories were assigned using application information. After this load shedding categories were revised on request from retailers. Some quality control checks are now also made at month end, as recommended during the last audit and any possible changes arising raised with retailers.

It was identified during the audit that GasNet had understood that retailers determined the load shedding category and that GasNet acted on their instruction. The auditor explained that the distributor was actually the owner of this field and had the responsibility for determining the load shedding category and keeping this field up to date.

Lists of outliers were reviewed to see if the load shedding category was accurate.:

- Coincidences of load shedding category with atypical network pricing codes
- DOM but with indications in other fields that the premises might be commercial (ANZSIC details or premises information)

2 ICPs were found to have been categorised DOM when it was a commercial property and should have been category 6. One of these was a new ICP created in 2023.

13 ICPs were identified as needing to be moved from category 4 to category 6.

3 ICPs were identified as needing to be moved from category 6 to category 4.

Incorrect load shedding category		
Non-compliance	Description	
Report section: 4.3 Rule: 58.1 From: registry set up To: date of audit	Audit history: Yes Controls: Needs improvement Impact: Insignificant	Data analysis of the load shedding category against other registry fields identified 18 ICPs with incorrect categories. The impact has been categorised as insignificant as there has not been a Critical Contingency curtailment event in the GasNet area. Critical Contingencies are rare, but the potential impact of incorrect categories is major should an event occur.

Remedial action rating	Remedial timeframe	Remedial comment
In Progress	25/03/2024	All Load Sheds have been reviewed by GasNet and updated in the Gas Registry as required.
Audited party comment		
The circumstances of the matters outlined in the breach notice.	GasNet agrees	
Whether or not the participant admits or disputes that it is in breach.	GasNet admits breach	
Estimate of the impact of the breaches (where admitted).	Little to no impact unless a major event occurs.	
What steps or processes were in place to prevent the breaches?	Retailers are asked to advise Load Shed when a new connection is requested. Annual review of Load Sheds by GasNet.	
What steps have been taken to prevent recurrence?	Retailers have been emailed regarding the ICP's that need the Load Shed updating. Responses have been received from 3 out of the 4 Retailers affected. The Load Sheds of the Retailers who have responded have been updated. The Load Sheds of the Retailer who did not respond have been reviewed and updated by GasNet as required. GasNet to review the Load Shed categories on a six monthly basis with added emphasis on meter sizes.	

Alleged breach detail can be found in Appendix 4.

Recommendation

Add a check of network tariff codes against load shedding category to the routine monthly quality checks and update procedure documents and staff training to ensure it is understood GasNet are responsible for the accuracy of the load shedding category, not retailers.

Altitude

A review of active GasNet ICPs looked for altitudes that were outliers compared to other ICPs at the same gas gate, these included both new and established ICPs. No issues were found.

Network pressure

Each network pressure group was reviewed by gas gate to look for outliers. The data was very consistent with the information from Midas for Gate Pressure and NOM aligning, and NOM in Midas aligning with network pressure in the registry.

Some inconsistencies were identified and further reviewed while on-site. 3 ICPs with a network pressure of 1500 were reviewed (all the other ICPs in Marton had a pressure of 210). Some

ICPs at Whanganui with a gate pressure of LP1 and network pressure of 2. These were all verified as correct.

No network pressure issues were identified.

4.4 Notices of gas gate creation/decommissioning

Rule 45 requires that distributors notify the GIC, registry and allocation agent 20 business days prior to a gas gate creation or decommissioning taking effect.

There had been no GasNet gas gates created or decommissioned since the last audit.

4.5 Publishing of network price category codes

It was confirmed that the GasNet price category codes are published on the GasNet website. This was viewed on 29 December 2023 and the current prices from 1 October 2023 were available.

However, it was noted that 11 active ICPs have network price codes other than those published. These are larger sites with bespoke pricing arrangements. This means there will be a need for participants to request pricing information.

4.6 Disclosure of ICP information

GasNet do get occasional requests for pricing information as their largest sites have bespoke pricing which is not made publically available. Under rule 50 they are required to respond to these within 1 business day. These requests are received and responded to via email.

GasNet noted these requests were very infrequent. The email records were searched for any examples and 2 were found, both of which were responded to within 1 business day – the pricing information was shared in both examples. No instances of GasNet declining to disclose pricing information were found.

Although no examples of non-compliance were found it was not possible for the auditor to ensure all instances of pricing requests had been identified for examination. GasNet also did not have any specific controls to ensure all pricing requests were quickly identified and prioritised.

Recommendation

Pricing requests under rule 50 should be identified on receipt, logged and the emails filed together, to ensure a prompt response is prioritised and to enable compliance with the rules to be demonstrated

4.7 Loss factor codes

GasNet had not added or deleted any loss factor codes since the last audit, so there was no requirement to notify under rule 48. GasNet do not use loss factor codes.

5. Obligations as meter owner

GasNet is the meter owner for approximately 12,500 ICPs, all on the GasNet network, except for approximately 300 ICPs on the Powerco network. None of the Powerco sites were new ICPs established since the last audit.

They do not have any meters on other distributor networks.

The same system is used to gather information for both distributor and meter owner obligations. The same process documentation is used for new ICP meters as for new distribution connections and meter details are also held in Midas, with automatic overnight updating via FileZilla.

As a part of the new ICP process, applications for connections detail the expected appliances. GasNet therefore has an expectation of what the load at the ICP is likely to be, which in turn enables them to select an appropriate meter. All decisions about metering setup and all entries into the Midas system are managed in-house by GasNet staff, not subcontractors.

5.1 Compliance with NZS5259

The focus of this audit is predominantly the switching rules, but it extends to the Gas (Downstream Reconciliation) rules with respect to GasNet as meter owner, in particular to rules 26.5 and 27. These rules specifically require meter owners to support compliance with and verify accuracy in accordance with NZS5259. Compliance with this standard is therefore included within the scope of this audit.

Every new ICP is visited by technical staff and a site plan is produced. Engineering review the site visit for every new ICP and signoff the meter selection. For any site above domestic and the smallest commercial users, engineering design the site, select the equipment and supervise the site installation to ensure compliance with NZS5259. Meter selection and gas measurement system design is not delegated to subcontractors.

No issues arose with regard to the selection of metering equipment or the design of gas measurement systems.

5.1.2 Documentation

NZS5259 requires documentation be kept to demonstrate conformance with the requirements of the standard. The documentation requirements can be summarised as follows:

NZS5259 section 2 sets out performance requirements.

- Records shall be kept of the suitability of the GMS components for the life of the asset (NZS5259 2.8.2)
- Documentation shall be kept of the acceptance testing, installation, operating conditions, and maintenance of the GMS components for the duration of its service (NZS5259 2.8.3)

NZS5259 section 3 provides a means of compliance. Alternative methods for establishing compliance with the section 2 requirements may be used provided they are tested and documented.

- Records shall be kept to monitor the performance and maintenance of each GMS component, for at least the life of each component and shall include the results of all acceptance and as-found tests and the date and details of all maintenance. (NZS5259 3.7.1)
- Records shall be kept for each complete GMS detailing all inspections, maintenance and changes to the components and shall include the identity, location and date of installation of each installed component, maintenance test results and the scheduled dates for the next maintenance, test or replacement. (NZS5259 3.7.2)
- Procedures for selection, installation and maintenance of GMSs shall be documented. (NZS5259 3.7.3)

As a part of the audit a review was undertaken of the requirements of NZS5259 documentation for a small sample of ICPs, including both TOU and non-TOU sites. GMS records are all stored on site in an archive room. For all ICPs selected GasNet was able to provide relevant records of equipment selection/site visits, installation, maintenance and testing.

The documentation provided for this small sample, reassured the auditor regarding GasNet complying with NZS5259 both in relation to the requirement for documentation to be maintained and stored, and with the wider requirements regarding equipment selection, testing and maintenance.

5.1.3 Operation and maintenance

GasNet has a master spreadsheet which controls GMS maintenance. GasNet have two types of maintenance programmes, a sampling programme and routine maintenance programme for their category A and category B meters. The in-house engineering team decide which ICPs require category A versus category B maintenance. Where routine regular maintenance is required, engineering determine what should be completed and at what interval.

The auditor was shown a copy of the maintenance spreadsheet as at the end of 2023. The spreadsheet records the maintenance completed and the maintenance to be done next, for both category A and B maintenance. For Category A maintenance the type of maintenance that has been done to date and what is due next is also shown e.g. 6 month maintenance, 1 year maintenance, 2 year maintenance etc.

The spreadsheet is routinely reviewed and the appropriate work orders raised for the relevant check that is due. The technician has a worksheet which shows the specific activities that need to be done for the relevant check, which was also viewed during the audit.

Once the work is done a site sheet is returned to the GasNet office and the master spreadsheet is updated. The spreadsheet details the amount of maintenance overdue at any time so this can be monitored.

Rule 29 of the Gas (Downstream Reconciliation) Rules 2008 require retailers to upgrade ICPs to TOU meters if their consumption increases to above 10 TJs/per annum. The rules give retailers 3 months to do this. The auditor asked GasNet how they supported retailers in complying with this rule.

GasNet had only received one retailer request to upgrade a site to TOU since the last audit. That request had been received on 12 October 2020 and the site was upgraded by 26 November 2020.

The GasNet job management system (Univerus) was viewed back for the last 6 months to identify metering queries from registry participants. All of the jobs raised had been completed and closed within a reasonable timeframe. At the date of the audit only 1 job remained open, it had been raised the week prior and related to a minor issue.

5.1.4 Testing

Copies of acceptance and 'as found' test results for the last 4 months and for the sample ICPs discussed in the documentation section above, were supplied as evidence of routine testing activity,

The auditor was also shown the spreadsheet, managed by engineering, used to manage the sampling programme.

During the audit the auditor sighted records of the last sampling activity showing the sampling selection process. Those selected are sent to Landy and Gyr in Auckland for testing.

Engineering keeps a record of the outcome of all sampling for monitoring/analysis, which was seen during the auditor's site visit. This monitoring feeds into decisions about future sampling.

Where sampling is done engineering select the samples and monitor the outcomes. Monitoring sample results can lead to the identification of trends, which in turn is used to inform future sampling. The collation/analysis of sampling results was sighted by the auditor during the on-site visit including future sampling activity out to 2029.

The evidence of the direct involvement of the engineering team in equipment selection and system design; the level of activity occurring regarding maintenance and testing under the direct supervision of engineering and the documentation GasNet were able to provide to evidence the activity, reassured the auditor with regard to GasNet's compliance with NZS5259.

5.2 Provision of metering price codes

GasNet supplied a copy of their meter pricing schedule, which is sent to all retailers as part of the yearly pricing updates and is also available on request.

5.3 Disclosure of ICP information

There were no meter price codes where the pricing information wasn't included on the price schedule provided, available to all retailers.

5.4 Registry information for new ICPs

GasNet manage their data for new ICPs for both distributor and meter owner fields as a part of a single new ICP process. All site information (both as distributor and meter owner) are managed within the same system, Midas, by the same team.

Although they own some meters on the Powerco network, these are all for established sites and they have not put in any new meters on a non-GasNet site since the last audit.

The parameters are entered into Midas (and so subsequently into the registry via an automatic overnight job) using installation sheets provided by site staff which are all retained.

A sample of 24 new ICPs were reviewed for accuracy of their meter fields, with an emphasis on meter pressure; charge code and register reading digits. No errors were found.

The same sample of 24 new ICPs were reviewed to see if the meter owner registry values had been entered into the registry in a timely fashion. Of those reviewed two were found to have the data entered late (i.e. more than 2 business days after installation was confirmed). One was late due to resourcing issues (staff illness) the other because Midas had not been available.

Midas is routinely not available for a few days in October, immediately after September billing, to allow the pricing for the new gas to be uploaded. While this outage occurs updates for new ICPs are kept on hand until the system is available again.

Registry values entered late		
Non-compliance	Description	
Report section: 5.4 Rule: 56.1 From: 12 October 2021 To: 9 December 2021	Audit history: Yes Controls: Needs improvement Impact: Minor	2 new ICPs, out of a sample of 24, did not have their meter owner registry data entered into the registry within 2 business days of being informed that the equipment had been installed.
Remedial action rating	Remedial timeframe	Remedial comment
In Progress	October 2025	This issue occurs when we are waiting for our pricing to be updated in our database (MIDaS). This is not able to be actioned until mid October.
Audited party comment		
The circumstances of the matters outlined in the breach notice.	GasNet agrees	

Whether or not the participant admits or disputes that it is in breach.	GasNet admits breach
Estimate of the impact of the breaches (where admitted).	Minor in nature due to the volume of ICP's GasNet deals with, however, a breach did occur.
What steps or processes were in place to prevent the breaches?	This is a software issue due to annual pricing implementation.
What steps have been taken to prevent recurrence?	GasNet will enter new ICP's manually into the Gas Registry during this time as per Auditors recommendation. This will be added to the ICP creation instruction.

See Appendix 4 for the alleged breach detail.

Recommendation

When Midas is not available (routinely during the October pricing upload) the registry should be updated manually by logging on to the front end of the registry, rather than delaying the update and relying on the overnight update from Midas once the system is available again.

5.5 Maintenance of ICP information

Some meter data quality checks are included in the monthly data quality checks referred to in the distributor section above. These include a comparison of the meter owner parameters in the registry against the equivalent fields in Midas. Following the last audit a check for ICPs with no meter but a status of GAS had been added to the quality checks.

As a part of the audit the data in GasNet's Midas system was reviewed against the registry for accuracy in the meter owner fields. A list of records that did not align were further reviewed. Most issues were the result of timing differences between when the files had been pulled from the registry and Midas, any remaining were explainable or related to sites that had been decommissioned.

The auditor had identified some meter pricing codes that were outliers to investigate on site, but on further review these were all explainable. No errors in meter price code were identified.

The auditor had also found some ICPs where the meter pressures were outliers. These were also reviewed on site. No issues were found.

1850 metering events had occurred during the audit period, of these only 25 were entered into the registry more than 30 business days after the event date. Some of these were viewed on site and the event was an update resulting from a quality check where the event date was backdated and the others mostly resulted from the receipt of late paperwork. The proportion of late updates was small and not a concern.

6 Breach allegations

All breach allegations are made under the Gas (Switching Arrangements) Rules 2008 unless otherwise stated.

Section	Summary of issue	Rules potentially breached
4.3	<p>Incorrect event dates added to the registry for 11 DECRs processed in 2023.</p> <p>The date entered should have been the date the site was originally decommissioned, not the date that DECR was entered into the registry.</p>	r58.1
4.3	<p>Out of a total of 150 pricing events, 20 were found to have incorrect event dates in the registry due to the defaults used by the automated registry update system, which were not appropriate to the type of event and had not been overwritten by the routine manual review.</p>	r58.1
4.3	<p>Data analysis of the load shedding category against other registry fields identified 18 ICPs with incorrect categories.</p>	r58.1
5.4	<p>2 new ICPs, out of a sample of 24, did not have their meter owner registry data entered into the registry within 2 business days of being informed that the equipment had been installed.</p>	r56.1

7 Conclusion

The summary of report findings shows that the GasNet control environment, for the 15 areas evaluated, was found to be: “effective” for 10 areas; “acceptable” for 2 areas; “needs improvement” for 1 area; “not applicable” for 2 areas.

4 breach allegations are made in relation to GasNet regarding the non-compliant areas and are summarised in the above table. The following recommendations were also made:

Recommendations

Alter the new ICP process documentation to make it clear that it is GasNet’s responsibility to decide the load shedding category. Include information about the definition of each category in the process document to assist staff with this decision.

Procedure documents should be revised, and staff training occur, to ensure accuracy and consistency of event dates.

Add a check of network tariff codes against load shedding category to the routine monthly quality checks and update procedure documents and staff training to ensure it is understood GasNet are responsible for the accuracy of the load shedding category, not retailers.

Pricing requests under rule 50 should be identified on receipt, logged and the emails filed together, to ensure a prompt response is prioritised and to enable compliance with the rules to be demonstrated.

When Midas is not available (routinely during the October pricing upload) the registry should be updated manually by logging on to the front end of the registry, rather than delaying the update and relying on the overnight update from Midas once the system is available again.

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 but 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</u> of issues 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	Controls	Impact
Completed (done)	Compliant.	No impact, or the impact is resolved.
In progress (underway)	Not compliant. Resolution pathway is clear, and a fix is underway.	There is an impact. Resolution pathway is clear, and a fix is underway.
No action (won't happen)	Not compliant. Participant won't be taking remedial action.	No impact, or if there is a possible impact, the participant will not be seeking resolution.

Appendix 4 – Alleged breach details

Section 4.3

DECR events where the incorrect event date was entered in the registry

0000019623GN17F
0000023687GN706
0000023766GN8FD
0000031375GN930
0000018962GN130
0000021889GN1D6
0000014364GN135
0000011248GN15A
0000027935GNCBE
0000016243GNBEE
0000014828GN380

Pricing events where the incorrect event date was entered into the registry

0000019623GN17F
0000016461GN038
0000015425GN177
0000025276GN295
0000011227GN174
0000032359GN59B
0000019224GN0B4
0000032563GN6F4
0000031361GN297
0000031266GN659
0000031778GNA6A
0000019275GN4F9
0000031156GN2A2
0000031621GN537
0000018433GN075
0000023824GN5D2
0000031618GNC9E
0000013357GNE6D
0000019616GNBC8
0000031482GNBEF

Load Shedding changes

ICP	Original Load Shed	Revised load shed
0000032811GN624	DOM	6
0000014135GNF7F	DOM	6
0000011133GN9D0	6	4
0000019219GN817	6	4
0000031157GNEE7	6	4
0000027339GN5AA	4	6
0000031224GN479	4	6
0000031421GNF30	4	6
0000023481GNC8E	4	6
0000026482GN76E	4	6
0000029123GNF51	4	6
0000014497GN2E0	4	6
0000019742GNBCE	4	6
0000021286GN402	4	6
0000021722GN812	4	6
0000024228GN8A6	4	6
0000025282GN388	4	6
0000025316GN461	4	6

Section 5.4

2 new ICPs didn't have the meter owner registry values uploaded to the registry within 2 business days

ICP	Installation Date	Date entered into the registry
0000032555GN083	12/10/21	21/10/21
0000032588GN29A	3/12/21	9/12/21