PERFORMANCE AUDIT REPORT UNDER THE SWITCHING ARRANGEMENTS AND DOWNSTREAM RECONCILIATION RULES

Advanced Metering Services Limited as Meter Owner

Audit date: 7, 9 and 10 June 2022

Report date: 18 August 2022

Under the Gas (Switching Arrangements) Rules 2008 and the Gas (Downstream Reconciliation) Rules 2008 the Gas Industry Company commissioned Langford Consulting to undertake a performance audit of Advanced Metering Services Limited in its role as 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 commissioned Langford Consulting to undertake a performance audit of Advanced Metering Services Ltd (Vector Metering) in its role as meter owner.

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*.

The summary of report findings shows that the Vector Metering control environment was "effective" for seven out of the eight areas evaluated and "adequate" for one area; they were compliant for 5 areas and non-compliant for 3 areas.

Six breach allegations are made in relation to Vector Metering regarding the non-compliant areas and there are alleged breaches against several retailers for incorrect status and profile codes. The breach allegations are summarised in the following table. The following recommendation is also made:

> **Recommendation:** That Vector Metering review new ICPs created since March 2017 to establish those that should have "Y" in the telemetry field and correct the registry. The process for creating files to push to the registry should also be amended to prevent further errors in the telemetry field.

Summary of breach allegations

Section	Summary of issue	Rules potentially breached
4.3	1 request for disclosure of pricing information had not been responded to within the required timeframe (rule 50.2)	50.2
4.4	In a sample of 40 new ICPs, information for 5 ICPs had not been entered into the registry within 2 business days of confirmation that the metering equipment had been installed	56.2
4.4	In a sample of 40 new ICPs, 5 ICPs had incorrect entries in the telemetry field.	58.1
4.4	In a sample of 40 new ICPs, 1 ICP was found to have the incorrect billing code in the registry	58.1
4.4	2 new ICPs were incorrectly recorded as having smart meters	58.1
4.5	A number of retailers had incorrectly identified ICPs as not XTOU • CTCT 2 ICPs • GENG 1 ICP • GMTH 1 ICP • GNVG 17 ICPs Two retailers had incorrectly identified ICPs as XTOU • GNVG 1 ICP • PUNZ 1 ICP	58.1
4.5	A number of retailers had incorrectly recorded the status of ICPs as active when the meter had been removed • CTCT 24 ICPs • GENG 52 ICPs • GEOL 2 ICPs • HANE 1 ICP • MEEN 15 ICPs • PUNZ 3 ICPs	58.1
4.5	Vector Metering had incorrectly recorded the wrong meter pressure in the registry for 1 ICP and the wrong number of dials in the registry for 2 ICPs.	58.1

Summary of report findings

Issue	Section	Control Rating (refer to appendix 1 for definitions)	Compliance Rating	Comments
Participant registration information	3.1	Effective	Compliant	Contacts and address were current
Obligation to act reasonably	3.2	Effective	Compliant	No examples of Vector Metering acting unreasonably were found
Obligation to use registry software competently	3.3	Effective	Compliant	No examples of Vector Metering using software incompetently were found
Compliance with NZS5259	4.1	Effective	Compliant	Vector Metering have instigated processes to confirm their FSP installs correctly sized meters since the last audit
Provision of metering price codes	4.2	Effective	Compliant	No issues found with this process
Disclosure of ICP information	4.3	Effective	Not Compliant	Processes had been improved since the last audit so that compliance can now be verified, rather than being inferred by a lack of complaints. 1 non-compliance was found.
Registry information for new ICPs	4.4	Adequate	Not compliant	A systematic error meant all new ICPs were being loaded in the registry with "N" in the telemetry field. 5 out of 40 new ICPs sampled had not had information loaded into the registry within 2 business days.
Maintenance of ICP information	4.5	Effective	Not compliant	Errors by Vector Metering in the registry information were minimal compared with the number of GMS owned

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1. Introduction

Under the Gas (Switching Arrangements) Rules 2008 (the switching rules) and the Gas (Downstream Reconciliation) Rules 2008 (the reconciliation rules) the Gas Industry Company commissioned Langford Consulting to undertake a performance audit of Advanced Metering Services Limited (Vector Metering) in its role as meter owner.

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*.

The engagement commenced on 14 March 2022 and involved meetings with Vector Metering staff on 7,9 and 10 June 2022. Meetings were conducted via Microsoft Teams out of respect for Vector's covid-19 protocols.

The focus of the audit is predominantly the switching rules but extends to the reconciliation rules with respect to Vector Metering's role as meter owner, in particular to rules 26.5 and 27 of the reconciliation rules. 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.

2. General Compliance

2.1 Switch Breach Report

The Market Administrator has not received any alleged breaches relating to Vector Metering since the last audit.

2.2 Summary of previous audit

Vector Metering was audited for the first time in 2018. The summary of report findings shows the control environment, for the eight areas evaluated, as "effective" for five areas, "adequate" for two areas and "not adequate" for one area.

Six breach allegations were made regarding the non-compliant areas and there were alleged breaches against several retailers for incorrect status and profile codes. The breach allegations are summarised in the following table. The following observations and recommendations were also made:

> **RECOMMENDATION:** That Vector Metering commence a routine check process to review the size of meter installed by their field service provider (FSP) against the information held about expected load to ensure gas measurement system (GMS)

installations are correctly sized to ensure accuracy to the maximum permissible error (MPE) in NZS5259. Vector is already working on implementing such a process.

OBSERVATION: When designing a GMS for larger sites Vector Metering engineers consider the MPEs of the individual components and ensure they are within the requirements of NZS5259 for the expected conditions, however no consideration is given to the MPE of the overall GMS.

RECOMMENDATION: Vector Metering should ask its engineers to consider the interaction of components and the resulting compliance of the overall GMS with the MPE requirements of NZS5259 when designing bespoke GMS for larger sites and request a sign off on the design to that effect.

RECOMMENDATION: The auditor recommends that Vector Metering identify and separately log any registry participant requests for charge information as disclosure requests under rule 50 and record their responses in such a way that future auditors can assess compliance with rule 50.

2.3 Provision of Information to the Auditor

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

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

3. General Obligations

3.1 Participant registration information

The Vector Metering participant information was reviewed. The address was current and a test email and phone call to the contact details supplied resulted in prompt responses. The registration information is therefore considered compliant.

3.2 Obligation to act reasonably

No instances of Vector Metering acting unreasonably were found as a part of this audit.

3.3 Obligation to use registry software competently

No instances of Vector Metering using registry software incompetently were found as a part of this audit.

4. Obligations as Meter Owner

Vector Metering had not undergone any major system upgrade since the last audit. It uses three systems to manage its processes. GMMS (also known as Servicemax or Salesforce but referred to as GMMS in this report) holds the information used in the registry, SAP records the planned maintenance and Siebel manages the work order process. The registry is kept up to date by an automated update from GMMS in close to real time. They use the installation ID as the unique reference which links records to the ICP.

GMMS receives data from the registry to keep the network pressure, altitude, gas gate and status code information up to date. The number of register reading digits, multiplier and meter pressure fields are completed by data entry. All e-mail enquiries into the gas enquiries inbox are automatically tracked and case managed through GMMS.

Registry updates from GMMS are automated, work lists are created if there is a data clash based on pre-set rules. They also have a suite of regular monthly reports which they run to check for data quality issues. These look for data inconsistencies which are then worked and resolved.

Vector Metering and their field service provider (FSP) both use the same call centre for reactive (emergency) call management. One improvement since the last audit was that it is now easier for the field technician to identify the type of meter for each ICP.

The gas metering responsibilities within Vector Metering are still split between two teams, one focusing on data quality, the FSP and the retailer relationships and one focusing on the management and maintenance of commercial and industrial sites.

The main change since the last audit was that installation of smart meters had now commenced. Initially this was for Genesis ICPs on the Vector and First Gas distribution systems. They were exclusively for residential sites. Smart meters are now being deployed for new residential ICPs and residential meters reaching end of life and needing replacement. The legacy residential meters were diaphragm, the smart meters now being used were ultrasonic with inbuilt meters, which measure flow rates.

The smart meters being installed by Vector Metering at residential sites were ultrasonic with an inbuilt communications device. They had a capability of up to 7kpa. Data goes via a cellular network to a proprietary headend comprising of hardware and software and goes to Vector internal systems. Where contracted to do so the data is provided to retailers.

4.1 Compliance with NZS 5259

Vector Metering have a suite of policy documentation, which were made available to the auditor. In particular copies of the following were provided:

GMS1 GMS Design – last reviewed April 2021

GMS2 GMS capacities for standard Vector Metering meter types – last reviewed April 2022

GMS28 GMS maintenance – last reviewed July 2019

These are designed to comply with several standards, including NZS5259. Designs are based on the minimum network pressure, which is usually about half the typical network pressure, and assumes the maximum load of all appliances synchronise. This ensures a conservative position

capable of handling all anticipated scenarios. TOU metering is always installed by retailer request, unless it is better to install the GMS at network pressure (because the customer needs a high load at lower pressure). The design policy determines pipe sizing and require welded fittings.

The policy documents had all been recently reviewed and updated. This had occurred since the last audit. However, they haven't yet been updated for smart metering, which to date is only focused on residential sites. Vector Metering didn't consider the smart metering to have fundamentally changed their GMS design philosophy. GMS28 determines the maintenance philosophy for systems 10 cubic meters and over, residential meters are sample checked.

Installation of correctly sized meters

Rule 27.1.1 of the downstream reconciliation rules requires every meter owner to ensure all metering equipment complies with NZS5259 and that metering equipment needs to have a margin of error less than that specified in NZS5259 to be considered accurate. (r27.1.2)

Vector Metering hold the original data relating to the anticipated load for new ICPs in their Siebel system. Their procedure document GMS2 has a capacity table which indicates the GMS that should be installed for different anticipated loads and pressures to ensure their GMS comply with the maximum permissible error (MPE) requirements in NZS5259.

During the last audit it was identified that the FSP didn't always install the meter recommended by Vector's policies. It was recommended Vector commence a routine check process to review the meter installed by their FSP to ensure they comply with the policy and therefore also comply with the MPE requirements of NZS5259.

Vector Metering have since implemented a routine check process to assess the size of a meter installed by their FSP. Initially Vector had commenced a bi-monthly check. This was subsequently shifted to a FSP quality check with Vector performing spot checks.

Designs for large sites are reviewed by an asset engineer or the Gas Manager. This review includes consideration of the overall design as well as the appropriateness of the individual components, against NZS5259 Maximum Permissible Errors.

During the audit a sample check was done of a new TOU site, installed in January 2021. The site had a bespoke design, designed by the asset engineer and peer reviewed by the FSP and a Vector Metering colleague. The system was too large to apply the GMS2 approach, so had instead been designed to the principles described in GMS1. It was designed to operate at network pressure. All individual components were supplied with acceptance testing certification to confirm they met with NZS5259 standards. The records were kept by the FSP. The auditor was shown the sample design, which demonstrated the design signoff process, including the consideration of the overall MPE of the bespoke design.

Sample checks were also done on non-TOU sites (old and new), including checking in Siebel that the equipment expected to be installed for a new site according the GMS2 was actually installed and that the information in GMMS and Siebel matched.

No issues arose this audit regarding installation of correctly sized meters.

Maintenance and testing

Maintenance records for a sample of established sites were reviewed in SAP. These showed records of regular activities such as M01 (a routine non-interruptive check); M02 (an interruptive check which checked reliefs); M03 (a meter overhaul); M04 (a Meter exchange, which would involve the removed meter being tested). There was evidence of routine BVI checks occurring. The auditor was able to view the relevant FSP on-site maintenance sheets.

As a part of the audit Vector Metering also provided the auditor with:

- records of the acceptance and as found test results for the preceding 4 months.
- A log of jobs raised as a consequence of participant metering queries including the open and close date and a description of the issue and outcome
- A copy of the meter maintenance programme for the last 6 months

No concerns arose regarding the maintenance and testing of the Vector Metering GMS.

4.2 Provision of metering price codes

As at June 2022 Vector Metering had 357 metering price codes loaded on the gas registry, 73 more than at the last audit. The auditor reviewed these against the price codes in GMMS to see if there were any codes not loaded into the registry, any anomalies were reviewed as a part of the audit, no issues were identified.

The associated charges are not published as they are considered commercially sensitive. However, relevant details are shared with each retailer and as supporting data with the monthly invoicing.

4.3 Disclosure of ICP information

Vector Metering make all their meter price codes available on the registry but do not make the associated charges available publicly. Retailers are aware of the charges that relate to their ICPs through their contractual arrangements with Vector Metering and there is supporting information in their invoicing.

The business requires that an application be made when requesting GMS fee pricing where the requesting party is not the current retailer. The applications do not require any prescribed format, however they are to be emailed and requested by a current gas participant. These are logged as pricing enquiries in GMMS.

Vector Metering provided a list of pricing queries received in the last 6 months, including the date of receipt and date of the response. This was an improvement since the last audit when there was a recommendation that these requests be separately identified so that future auditors could review handling of such requests.

There were 10 instances on the list and, of these, all requests had been complied with except one, it was declined because Vector Metering was not the meter owner. 9 out of 10 pricing queries had been responded to within the required timeframe. There was 1 instance of a request not being responded to within 1 business day and the requested information supplied. This instance had taken longer than the timeframes stipulated in rule 50.2, due to staffing availability resulting from Covid and annual leave.

Alleged Breach: 1 request for disclosure of pricing information in the last 6 months had not been responded to within the required timeframe (rule 50.2)

See Appendix B for alleged breach detail.

4.4 Meter owner information for new ICPs

Requests for a meter for a new ICP arrive from a retailer and are entered directly by the retailer into Siebel. The field technician executes the request and is then responsible for entering the details into GMMS. All paperwork is reviewed by a team member. Quality checks in the system alert the team member to exceptions which they will review and correct as necessary while reviewing the paperwork. GMMS sends a PDF via email to the retailer as confirmation that the job has been completed and to provide the retailer with the relevant details. GMMS also updates the registry.

Occasionally issues arise with the registry update, but the team member will know immediately if the upload has failed. Siebel compares itself to GMMS and the registry to validate the details.

During the audit a sample of 40 new ICPs created since the last audit were reviewed. These were reviewed to see if Vector Metering had met the obligation of rule 56.2. Rule 56.2 requires that within 2 business days of confirming that the metering equipment has been installed, the meter owner enters into the registry the required information. The date recorded by the auditor as confirmation of installation was the date the FSP confirmed to Vector Metering that the installation had been completed, which is not necessarily the date the installation occurred. 5 ICPs were found to have not been entered in the registry within 2 business days.

Alleged Breach: In a sample of 40 new ICPs, information for 5 ICPs had not been entered into the registry within 2 business days of confirmation that the metering equipment had been installed.

Vector Metering explained that there was sometimes a delay with the billing code because it was feared the act of applying the billing code could trigger billing too early.

The accuracy of the registry parameters for the new ICP sample were confirmed back to the original installation paperwork. 5 out of 40 ICPs were found to have "N" in the telemetry field when they should have had "Y". It was established that this was a systematic issue with the way GMMS creates the file to push to the registry. It was failing to identify ICPs with telemetry and entering "N" in the telemetry for all ICPs. No ICPs had had "Y" entered in the telemetry field since March 2017.

Alleged breach: In a sample of 40 new ICPs, 5 ICPs had incorrect entries in the telemetry field.

Recommendation: That Vector Metering review new ICPs created since March 2017 to establish those that should have "Y" in the telemetry field and correct the registry. The process for creating files to push to the registry should also be amended to prevent further errors.

The review of new ICPs also identified 1 ICP with the incorrect billing code. This was a non-standard code that would have been entered in manually, so was the result of human error.

Alleged Breach: In a sample of 40 new ICPs, 1 ICP was found to have the incorrect billing code in the registry

It was established that advanced meters should all be recorded as having number of dials 5. The auditor reviewed the registry for inconsistencies. This identified 2 ICPs that had been recorded as "Y" in the advance meter field, but which were not advance meters. This arose from human error rather than any systematic issue.

Alleged breach: 2 new ICPs were incorrectly recorded as being smart meters

See Appendix B for alleged breach detail.

4.5 Maintenance of ICP information

The mechanism for maintaining the registry is similar to the updating of the registry for new ICPs. The start point is information being entered by the FSP into GMMS. This in turn updates the registry and sends the updated information to the retailer.

Vector Metering ensures the process is working by completing a monthly reconciliation between the registry and GMMS. A sample of established ICPs were reviewed for accuracy back to original paperwork where possible. Some older ICPs transferred from Contact didn't have original paperwork available. No issues were identified from this check.

Analysis of the registry data identified 21 ACTC/ACTV ICPs where Vector Metering had identified the ICP as TOU in the registry, but the retailer had not entered XTOU. Vector Metering were asked to confirm if the ICPs were in fact TOU and they confirmed that they were. Alleged breaches are therefore raised against the relevant retailers.

Alleged breach: CTCT had incorrectly identified 2 ICPs as not XTOU

Alleged breach: GENG had incorrectly identified 1 ICP as not XTOU

Alleged breach: GMTH had incorrectly identified 1 ICP as not XTOU

Alleged breach: GNVG had incorrectly identified 17 ICPs as not XTOU

The analysis also identified 2 ACTC/ACTV ICPs where Vector Metering had identified the ICP as not being TOU, but the retailer had entered XTOU. Vector confirmed the ICPs were not TOU.

Alleged breach: GNVG had incorrectly identified 1 ICP as XTOU

Alleged breach: PUNZ had incorrectly identified 1 ICP as XTOU

There were 97 ICPs in the registry where Vector Metering had recorded the meter as "REMOVED", but the retailer has the status noted as active (ACTC or ACTV). Vector confirmed the list and provided the auditor with the date when the meter was removed from GMMS. Alleged breaches are therefore made against the responsible retailer for having the wrong status code in the registry.

Alleged Breach: CTCT had incorrectly recorded the status of 24 ICPs as ACTC or ACTV when the meter had been removed.

Alleged Breach: GENG had incorrectly recorded the status of 52 ICPs as ACTC or ACTV when the meter had been removed.

Alleged Breach: GEOL had incorrectly recorded the status of 2 ICPs as ACTC or ACTV when the meter had been removed.

Alleged Breach: HANE had incorrectly recorded the status of 1 ICP as ACTC or ACTV when the meter had been removed.

Alleged Breach: MEEN had incorrectly recorded the status of 15 ICPs as ACTC or ACTV when the meter had been removed.

Alleged Breach: PUNZ had incorrectly recorded the status of 3 ICPs as ACTC or ACTV when the meter had been removed.

A comparison of registry data against Vector Metering system data found that the alignment was good. Vector metering performs a monthly reconciliation of its system information against the registry, which since the last audit now includes checking the accuracy of the number of register reading digits. The only issues identified were 1 ICP with the wrong registry pressure and 2 ICPs with the wrong number of dials. These have since been corrected in the registry.

Alleged Breach: Vector had incorrectly recorded the wrong meter pressure in the registry for 1 ICP.

Alleged breach: Vector had incorrectly recorded the wrong number of dials in the registry for 2 ICPs.

See Appendix B for alleged breach detail.

The auditor looked at examples of how retailer queries were dealt with. Retailers raise queries through Siebel, the spreadsheet reviewed was extracted from Siebel. The requests were for meter tests or premise verification. The first step was to price the job which involves gathering as much information as possible regarding the requirements. "Premise verification" related to any retailer query that involves the need for a technical person. The timeframe depends on the skill level required.

For TOU sites with corrector only, a manual check is done at the end of the month to supply information to retailers for billing. For TOU sites with a corrector and telemetry the data is managed by Vector's Data Services team who communicate data to retailers. They will identify and manage issues such as unusual high or low pressure, communications failure or other data anomalies. They are able to dial into the site, can check with retailers regarding any changes on site and can raise a job with the FSP if required. A sample of consumption data as provided to retailers was supplied to the auditor, no issues were identified.

Upgrades are requested through Siebel. An asset engineer will discuss these with the retailer. They will need to know if pipe alterations are required. The project will be agreed with the FSP, the price is sent to the retailer and, once accepted by the retailer, the job gets progressed.

5. Breach Allegations

Section	Summary of issue	Rules potentially breached
4.3	1 request for disclosure of pricing information had not been responded to within the required timeframe (rule 50.2)	50.2
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4.5	Vector Metering had incorrectly recorded the wrong meter pressure in the registry for 1 ICP and the wrong number of dials in the registry for 2 ICPs.	58.1

6. Conclusion

The summary of report findings shows that the Vector Metering control environment was "effective" for seven out of the eight areas evaluated and "adequate" for one area; they were compliant for 5 areas and non-compliant for 3 areas.

Six breach allegations are made in relation to Vector Metering regarding the non-compliant areas and there are alleged breaches against several retailers for incorrect status and profile codes. The breach allegations are summarised in the following table. The following recommendation is also made:

> **Recommendation:** That Vector Metering review new ICPs created since March 2017 to establish those that should have "Y" in the telemetry field and correct the registry. The process for creating files to push to the registry should also be amended to prevent further errors in the telemetry field.

Appendix A – 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.

Appendix B – Alleged Breach Detail

4.3 Disclosure of ICP information

Case Number	Case Reason	Subject	Case Origin	Opened Date	Closed Date
593102	Information update	GMS Pricing Request from Trustpower	Email	14/04/2022	22/04/2022

4.4 Meter owner information for new ICPs

Breach of 2-day rule

ICP Identifier	Date Information Received in GMMS	Date Information sent to GREG
1002063501QT6D6	12/06/2019	17/06/2019
1002069146QTBF8	18/09/2019	23/09/2019
1001302501NG497	16/03/2022	21/03/2022
1002112585QTDE3	11/02/2021	23/02/2021
1002076525QT548	19/02/2021	26/02/2021

1002112585QTDE3	Telemetry should have been Y
1001299226NG742	Telemetry should have been Y
1002057962QTE46	Telemetry should have been Y
1002076525QT548	Telemetry should have been Y
1002135742QT06C	Telemetry should have been Y

1002136222QT879	GREG needs to have manual update for correct Bill Code

ICP Identifier	Advanced Meter (should have been "N")
0002036201QT1CF	Y
1001301226NG9EA	Y

4.5 Maintenance of ICP information

ICP Identifier	Vector Metering Comment	Responsible Retailer Code	Profile Code	TOU Meter
0000033491QT27C	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0000322631QT591	ICP has TOU, retailer to correct information in GREG	GENG	GGRP	Y
0000621511QT4F4	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0000953421QTD8B	ICP has TOU, retailer to correct information in GREG	CTCT	GGRP	Y
0001033930NG351	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0001411878QTF10	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0001439079QT795	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0002005950NG386	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0002029509NGB9E	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0002320611QT6F6	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0003062853NG6C3	ICP has TOU, retailer to correct information in GREG	GMTH	GGRP	Y
0008000037NG731	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
0009000605NG0F3	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
1001133052QTBC8	ICP has TOU, retailer to correct information in GREG	CTCT	GGRP	Y
1001152000QT0BD	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
1001240350NGA65	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
1001287625NG7A2	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
1001290576QTA2E	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
1001299226NG742	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
1001301717NG752	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y
1002054790QTA3F	ICP has TOU, retailer to correct information in GREG	GNVG	GGRP	Y

ICP Identifier	Vector Metering Comment	Responsible Retailer Code	Profile Code	TOU Meter
0001553211QT802	TOU has been removed, retailer to correct information in GREG	GNVG	XTOU	N
1001299519NG066	No TOU on this ICP, retailer to correct information in GREG	PUNZ	XTOU	N

ICP Identifier	Responsible Retailer Code	Meter Identifier	ICP Status Code	Connection Status Code
0000018451QT3BE	CTCT	REMOVED	ACTV	GAS
0000018541QT017	CTCT	REMOVED	ACTV	GAS
0000018801QT7BA	CTCT	REMOVED	ACTC	GAS
0000019041QT4B2	CTCT	REMOVED	ACTV	GAS
0000025151QTDB7	CTCT	REMOVED	ACTV	GAS
0000026581QTE14	CTCT	REMOVED	ACTC	GAS
0000184741QT238	CTCT	REMOVED	ACTV	GAS
0000232641QTC41	CTCT	REMOVED	ACTV	GAS
0000293871QTAFA	CTCT	REMOVED	ACTV	GAS
0000348571QT82F	CTCT	REMOVED	ACTV	GAS
0000544561QT865	CTCT	REMOVED	ACTC	GAS
0000837951QTD6A	CTCT	REMOVED	ACTC	GAS
0000877461QT40F	CTCT	REMOVED	ACTV	GAS
0001562811QT284	CTCT	REMOVED	ACTV	GAS
0001720111QTB80	CTCT	REMOVED	ACTC	GAS
0001824261QT524	CTCT	REMOVED	ACTC	GAS
0002115421QT5DD	CTCT	REMOVED	ACTV	GAS
0002145301QT4FE	CTCT	REMOVED	ACTC	GAS
0002335211QT536	CTCT	REMOVED	ACTV	GAS
0004008612NGB10	CTCT	REMOVED	ACTV	GAS
0009000634NGB4E	CTCT	REMOVED	ACTV	GAS
1001150705QT1B0	CTCT	REMOVED	ACTC	GAS
1001300512NG1BA	CTCT	REMOVED	ACTV	GAS
1002045926QT648	CTCT	REMOVED	ACTV	GAS
0000018711QT218	GENG	REMOVED	ACTC	GAS
0000018761QT745	GENG	REMOVED	ACTV	GAS
0000018951QT6B6	GENG	REMOVED	ACTC	GAS
0000199801QTD53	GENG	REMOVED	ACTC	GAS
0000269961QT28F	GENG	REMOVED	ACTV	GAS
0000326391QTE0B	GENG	REMOVED	ACTC	GAS
0000706681QT1D1	GENG	REMOVED	ACTV	GAS
0001015271NG2B2	GENG	REMOVED	ACTV	GAS
0001034426NG91B	GENG	REMOVED	ACTC	GTD
0001757651QT8FE	GENG	REMOVED	ACTV	GAS
0001850631QTD14	GENG	REMOVED	ACTC	GAS
0002001682NG7CE	GENG	REMOVED	ACTC	GAS
0002002448NGA57	GENG	REMOVED	ACTC	GAS

0002003067NG57D	GENG	REMOVED	ACTV	GAS
0002011171NGCFA	GENG	REMOVED	ACTC	GAS
0002013371QT37B	GENG	REMOVED	ACTV	GAS
0002028911QT84D	GENG	REMOVED	ACTV	GAS
0002077241QT95F	GENG	REMOVED	ACTV	GAS
0002243251QTC86	GENG	REMOVED	ACTC	GAS
0003000925NGA0D	GENG	REMOVED	ACTV	GAS
0003001634NG24A	GENG	REMOVED	ACTV	GAS
0003002111NGFB2	GENG	REMOVED	ACTC	GAS
0003002618NGEE1	GENG	REMOVED	ACTV	GAS
0003004321NG78D	GENG	REMOVED	ACTV	GAS
0003008902NG792	GENG	REMOVED	ACTV	GAS
0003010024NG7A0	GENG	REMOVED	ACTV	GAS
0003012483NGD34	GENG	REMOVED	ACTV	GAS
0003014432NG603	GENG	REMOVED	ACTV	GAS
0003020698NG126	GENG	REMOVED	ACTV	GAS
0003022310NG03D	GENG	REMOVED	ACTV	GAS
0003023722NGAE1	GENG	REMOVED	ACTV	GAS
0003024181NGC58	GENG	REMOVED	ACTC	GAS
0003026684NGD55	GENG	REMOVED	ACTV	GAS
0003027354NG4B2	GENG	REMOVED	ACTC	GAS
0003028004NG6D9	GENG	REMOVED	ACTV	GAS
0003028216NG6F6	GENG	REMOVED	ACTV	GAS
0003029095NG4DB	GENG	REMOVED	ACTV	GAS
0003030598NGAC4	GENG	REMOVED	ACTV	GAS
0003030842NG01F	GENG	REMOVED	ACTV	GAS
0003030848NG28E	GENG	REMOVED	ACTV	GAS
0003031532NG1EA	GENG	REMOVED	ACTV	GAS
0003031533NGDAF	GENG	REMOVED	ACTC	GAS
0003031867NG1A5	GENG	REMOVED	ACTC	GAS
0003039196NG9FE	GENG	REMOVED	ACTC	GAS
0003063470NGAFA	GENG	REMOVED	ACTV	GAS
0003064881NGEC4	GENG	REMOVED	ACTV	GAS
0004001920NGFC2	GENG	REMOVED	ACTV	GAS
0004003195NG372	GENG	REMOVED	ACTC	GAS
0004009318NGD24	GENG	REMOVED	ACTC	GAS
0004009429NG99B	GENG	REMOVED	ACTV	GAS
0006000190NG1AF	GENG	REMOVED	ACTC	GAS
1001295789NGE06	GENG	REMOVED	ACTC	GAS
0002001642NG021	GEOL	REMOVED	ACTC	GAS
0003010657NG83B	GEOL	REMOVED	ACTV	GAS
0000909011QTB46	HANE	REMOVED	ACTC	GAS
0000016641QTBD4	MEEN	REMOVED	ACTC	GAS
0000018501QT2B2	MEEN	REMOVED	ACTC	GAS
0000024061QT2EB	MEEN	REMOVED	ACTC	GAS
0000189091QTA58	MEEN	REMOVED	ACTC	GAS
0000201591QT1CC	MEEN	REMOVED	ACTC	GAS
0000235981QT0C1	MEEN	REMOVED	ACTC	GAS

0000307661QT374	MEEN	REMOVED	ACTV	GAS
0000413711QT447	MEEN	REMOVED	ACTC	GAS
0000689881QT5F3	MEEN	REMOVED	ACTV	GAS
0000786361QT14B	MEEN	REMOVED	ACTV	GAS
0001002593NGB0E	MEEN	REMOVED	ACTC	GAS
0002002131NG45E	MEEN	REMOVED	ACTC	GAS
0002002894NG807	MEEN	REMOVED	ACTC	GAS
0003013969NG1B7	MEEN	REMOVED	ACTV	GAS
0003024630NGDAD	MEEN	REMOVED	ACTV	GAS
0007002370NG4EB	PUNZ	REMOVED	ACTV	GAS
0007002376NG564	PUNZ	REMOVED	ACTV	GAS
0007002437NG486	PUNZ	REMOVED	ACTV	GAS

Incorrect meter pressure recorded in the registry for 1 ICP

0002002424NG6B9

Incorrect no of dials recorded in the registry for 2 ICPs.

0002382009QTDE1
0001403911QTC14